



McMaster Campus



INTERNATIONAL COMPENDIUM 2014

EXPANDING OUR REACH

WORKING TOGETHER TO INTERNATIONALIZE
HIGHER EDUCATION



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Working together for a better future: global collaboration at McMaster



At McMaster, our continued success as a world-leading teaching and research-intensive university depends on an internationalization strategy that seeks to extend our reach, dissolve borders, and create programs and experiences that are unique, collaborative, and global in nature.

Given the complexity of globalization, we are adopting a transdisciplinary perspective based on innovative learning practices and research to respond to evolving global challenges. And we are forming ties with universities, organizations and institutions with whom we can work to develop real solutions and create impact.

This second International Compendium shows us where McMaster is having a global impact. We are involved with projects in over 130 countries exceeding over 1250 partnerships. With this edition, we showcase examples of university leadership and contribution to internationalization. Major themes have emerged as we continue to engage with our international community.

Dr. Andrea Baumann,
Associate Vice-President, Global Health

Setting Course: McMaster University and the Globalization of Higher Education

This new International Compendium follows and updates an earlier version compiled by the International Activities Ad Hoc Committee of McMaster University in 2009. While that document could be content to provide “a summary of various international issues and a sample of the seminal contributions of McMaster’s global footprint,” this update must recognize that in the intervening years internationalization in higher education has come to mean much more than simply the incorporation of “international content, materials and activity in the delivery of services.”¹

That last sentence is not intended to minimize the importance of the range of activities the 2009 study sought to document. Indeed, to cultivate international perspectives in the curriculum, to adduce and examine evidence of global provenance, and to encourage international mobility of students and faculty: these are activities natural and proper to any university worthy of the name, and together they ought to make universities enemies to parochialism everywhere in the world.

The *globalization* of higher education, which was noted in the 2009 report but which has accelerated dramatically in the intervening years, is a very different thing—a trend which brings considerations of ethics and global justice into the orbit of universities as never before. To the extent that it is characterized by the cross-border marketing of national “brands” in teaching and learning, and is not understood to imply a reimagining of national identities, globalized higher education paradoxically represents a new parochialism—not surprisingly unable to justify the claims made for it as a means of cultivating global citizenship because in many cases it exists to strengthen the economic advantage of the exporting nation.

In a further paradox, the emerging global hegemony of certain educational models—western, Anglophone, industrial, for example—is beginning to homogenize the international landscape and to erode if not eliminate desirable cultural and other differences. Making the parochial universal: this is therefore one of the real risks of globalization in the university sector, especially when in developed countries the enterprise is being driven by largely economic motives.

The 2012 report of the Advisory Panel on Canada’s International Education Strategy confirms our country’s participation in this trend. With a mandate “to make recommendations on a strategy to

¹ Recommendations Report, pp.8 and 11.

maximize economic opportunities for Canada,” the panel’s report, *International Education: A Key Driver of Canada’s Future Prosperity* could devote very few of its nearly one hundred pages to the issues—the educational, research and cultural goals—which would normally command our attention as educators. The Government of Canada’s International Education Strategy is situated squarely as a “key element of ... (its) Global Markets Action Plan,”² and while we would not disparage the desire to maximize economic opportunities for this country, it remains the responsibility of educators and educational institutions to ensure that any commodification of what we do does not eclipse its formative, developmental and pedagogical *raison d’être*. The latter we must also take care to ensure is not vitiated by unscrutinized chauvinism—by the assumption that the world will be better by being more Canadian.

Government reminds us that we do our work in a “highly competitive, knowledge-based global economy,”³ and in that context it is obvious that universities will need to be both increasingly scrupulous in safeguarding the integrity of the academic mission and deliberate and astute in their negotiation of commercial realities. At present neither of these ambitions is realizable except in relation to the other, and neither will lead to success outside of a thoughtful and comprehensive strategy for international engagement. To develop the latter has been the goal of ongoing discussions on campus over the last two years, and in part it was the mission of the *Forward With Integrity* Task Force on Internationalization that tabled its discussion paper in May, 2012.

Central to the recommendations of the Task Force⁴ was the assertion that McMaster should pursue a transformational model, an approach to global engagement that acknowledges that with meaningful internationalization will come far-reaching changes to McMaster itself. Within the institution, such an approach is in many ways the opposite of what, at the national level, I earlier described as “making the parochial universal.” Pointing out that the transformational model “provides both a definition of internationalization and guiding principles that enable global citizenship,” the Task Force went on to identify several strategies “to increase McMaster’s profile on the international stage and to ensure that every student at McMaster is exposed to international perspectives.” Further, the recommendation was for a “multi-dimensional approach,” including “bedrock” measures to foster global citizenship, “student recruitment and exchanges, collaboration, capacity building or developing intercultural knowledge.”⁵

While acknowledging that international education today is inextricably woven into global commerce, the Task Force sought to advance a “value-added” view, sensitive and responsive to a more profound understanding of our obligations as educators, researchers, students, and citizens of the world. Three points were given to summarize McMaster’s motive and driving force as an international university:

1. Cooperation for peaceful coexistence and mutual benefit.
2. International demand for the University’s expertise in research and education.
3. The “civic mission” of the University.

With Dr. Peter Mascher’s appointment as Associate Vice-President (International Affairs), the University has begun to make the structural and strategic changes required to advance this “value-added” approach to internationalization. Critical in the new arrangement will be a pan-university

2 Canada’s International Education Strategy: Harnessing our knowledge advantage to drive innovation and prosperity (Her Majesty the Queen in Right of Canada, 2014), 4.

3 Canada’s International Education Strategy, 4.

4 Forward With Integrity Internationalization Task Force Position Paper, 4 May 2012.

5 Forward With Integrity Internationalization Task Force Position Paper, 4 May 2012, 4.

International Strategy Advisory Group (ISAG), chaired by Dr. Mascher and reporting to the President, which will henceforth address the need for coordination and planning in this area. The Task Force recommended creation of a Centre for Global Engagement to perform this function, and probably over time, with the acceleration and diversification of global engagements, the ISAG will evolve in that direction.

The ISAG will bring together graduate, undergraduate and research matters⁶ and do its work in a notional space bridging the portfolios of the Provost and the Vice-President (Research and International Affairs) (VPRIA). A restructured Office of International Affairs (OIA) will be a resource and support to the Strategy Advisory Group and will continue to facilitate exchange agreements, establish institutional linkages and coordinate externally funded international projects and programs—all, however, subject to guidance from the ISAG, which will in turn seek endorsement of its approach from the President, Vice-President and Deans group (PVPD), established two years ago on a recommendation of the Forward With Integrity Advisory Group. International student recruiting will be brought under the responsibilities of the Provost.

The global standing of a university is not the sum of its student exchange agreements and international research collaborations, however critical those two elements will always be. It is also not entirely measurable in the number of visa students the university welcomes each year, or guaranteed by the volume of rhetoric on its website about global engagement. At McMaster we must continue to aspire to a more profound vision: to be an institution that is global in impact, that addresses through its research the great challenges of humanity without overlooking their local manifestations, and which seeks to educate students in all subjects so as to acknowledge the interconnectedness of all disciplines and all peoples.

Patrick Deane

President and Vice-Chancellor

March 2014

⁶ The ISAG will include the AVP (Students and Learning) and Dean of Students, the AVP and Dean of Graduate Studies, the AVP (Global Health), the AVP (Faculty), a representative of the University Research Council, a representative of University Advancement/ Alumni Relations, and up to three faculty members at large.



Message from the Provost

The International Compendium 2014 offers a catalogue of the breadth and scope of McMaster's global collaborations – across countries and within our local and internal communities. Comparing this document with the initial compendium produced in 2009 one sees a measurable increase in the number of partnerships, and the complexity in which our partnerships exist with institutions and organizations worldwide. There is evidence that we are making great strides in international research, and expanding our capacity in education, both through curriculum and program design, while strengthening strategic alliances, and paving the way for new opportunities. As noted by the President, the publication of this compendium, along with changes to the way in which Internationalization is conceived and supported, provides an opportunity to reassess our mission and examine our approaches to this complex field of scholarly activity. While faculty members are and always will be free to pursue collaborations across the globe on their own terms, the university has expectations that as a whole McMaster's internationalization efforts will contribute to building a stronger future for all.

Our global contributions are diverse and far-reaching. They include engaging in outreach projects in Haiti, investigating breast cancer biomarkers amongst women of African ancestry, and exploring internationalization through visual art. Every one of McMaster's Faculties are pushing the boundaries of global engagement, dissolving borders and responding in unique ways to evolving global challenges.

These and many other activities have moved McMaster over the past few years in terms of institutional vision around internationalization. In addition to, and with the support of, the many distinct partnerships outlined in this compendium, McMaster has a unique opportunity to ensure that all of our students leave the university with a broad perspective, seeing themselves as global citizens. We wish to educate students who feel enabled to make a global impact in whatever arena they choose to pursue. We are also committed to making McMaster a preferred destination for international students. By this we mean that students should not want to come to McMaster, solely because of the quality of the programs we offer or our reputation as one of the top 100 universities in the world, although these are certainly great strengths and motivators. They should also come because they see in McMaster an institution that welcomes the experiences and perspectives that they bring and which is open to being changed by their presence on campus. Only in this way will McMaster be able to distinguish itself as a truly global university.

We hope that, in publishing this inventory of global contributions, the Compendium will serve to reinforce McMaster University's leadership role in the internationalization of higher education and serve as a catalyst for greater coordination and focus of these endeavours.

David S. Wilkinson,
FRSC, FCAE, FCIM, FACerS, PEng
Distinguished University Professor
Provost and Vice-President (Academic)



Message from Vice-President, Research & International Affairs

In this rapidly changing world, globalization demands strong leadership in research with the enrichment of international dimensions. Through the Office of the Vice-President, Research and International Affairs at McMaster University, we are committed to providing the highest standards for research excellence and innovation in championing the sharing of knowledge and discovery on a local, national, and international level.

In order to remain a truly global institution, and to effectively foster global citizenship, we have adopted a mapping strategy to reflect the Research Enterprise at McMaster. At its core is the mission, vision and key goals of the University. We are taking action to ensure this Strategy Map is inclusive of an internationalized perspective threaded throughout every aspect of the academy, from our curriculum and program design to our research activities and partnerships, as we successfully integrate globalization into the University experience.

As one of Canada's leading research-intensive universities, McMaster is spearheading ground-breaking discoveries and strengthening relationships and collaborations with institutions across the globe. I am honoured to work with President Deane and Associate Vice-President, International Affairs, Peter Mascher on progressing our internationalization strategy as a research-focused, student-centred university.

The McMaster International Compendium 2014 provides evidence that we are engaging with leading institutions, countries, and communities. It also shows that, we are involved in initiatives that offer the most fruitful opportunities for learning and sharing valuable knowledge and information.

Dr. Mo Elbestawi

Vice-President, Research & International Affairs



Message from the Associate Vice-President, International Affairs

I wish to congratulate Dr. Andrea Baumann and her team on successfully completing the enormous task of collecting and organizing the information that makes the 2014 International Compendium such a valuable resource. While necessarily a snapshot at a certain moment in time, the Compendium provides insight into the broad range of McMaster's international activities spanning all Faculties and engaging faculty, staff and students at all levels.

Internationalization is a key component of fostering global citizenship. As one of Canada's most research intensive universities, McMaster's international footprint will be determined in no small measure by its many diverse interactions at the research level. In this context, it is important to remind oneself of the significant mutual benefits to be gained by engaging in international research partnerships. With knowledge and information being the new global currency, innovation through research partnerships will critically depend on how information is shared, utilized and leveraged and thus, research talent needs to be the central focus of our efforts to enhance international research collaborations and partnerships. Such a people-centered model of innovation supports and encourages the mobility of students and researchers among universities worldwide and where appropriate, the private sector can play a key role in developing and expanding international networking structures.

As was already pointed out in President Deane's comments, McMaster's international orientation is undergoing an important structural change, guided by the principles laid out in the *2012 Forward with Integrity Internationalization Task Force Position Paper*. I am honoured to have been tasked with leading this strategic change. The expert staff in the Office of International Affairs and I will work to cultivate opportunities that advance and generate increased involvement in international activities whether they are connected to study or research, to provide students and faculty with the environment to be exposed to global perspectives and in turn weave those experiences into the fabric of the University. I look forward to engaging many of the stakeholders listed in this Compendium in our future activities.

Peter Mascher,

PhD, FCAE, PEng

William Sinclair Chair in Optoelectronics

Associate Vice-President, International Affairs



International Compendium 2014





Strengthening our Global Impact

The International Compendium 2014 includes over 300 project submissions that showcase McMaster faculty's wide range of international activities, partnerships and innovations. The contributions highlight our dedication to cross-collaboration globally, as well as within our internal community, and reinforce the connectedness between faculties and departments. With this transdisciplinary approach to internationalization, and a commitment to working together, McMaster is redefining global engagement and strengthening its impact on the international scene.



Partnerships at Work

A key element of our internationalization strategy is forging global partnerships – research and educational alliances based on reciprocity, transfer of knowledge and resources, engagement with communities, and a commitment to effective collaboration.

We are involved with projects in over 130 countries, and within those countries have built over 1200 partnerships. McMaster's global partnerships involve a culture of integrity and a shared responsibility among the faculty, departments and schools, across nations and cultures, and within communities: these are the values that have allowed us to expand our global reach.

Collaborative Social Justice Initiatives

McMaster's strategic alliances include teaming with Parks Canada to explore issues involving governance conflicts and indigenous peoples here at home. Abroad, we have worked collaboratively in Bangladesh, with a grant funded by the Canadian International Development Agency (CIDA), in partnership with the Canadian Association of Schools of Nursing, international development agency Plan International Canada and consulting firm Co Water International Inc. The project aims to improve the maternal and neonatal health of Bangladeshi women and children living in poverty.

We have also created partnerships at the grassroots level – from a non-profit organization set up to empower women and promote peace and democracy in India, to research projects focused on educating women about the commercial sexual exploitation of women and children in Nicaragua.

Advancing Earth Sciences Research

We are collaborating across borders in the advancement of aerospace and earth science research, joining forces with the Operational Space Medicine program at the Canadian Space Agency and the National Aeronautics and Space Administration (NASA). We have also participated in the North American Carbon program, alongside NASA, the National Oceanic and Atmospheric Administration, the United States Department of Agriculture, and the United States Geological Survey, allowing graduate students to gain experience with field measurements and climate modeling works.



Internationalization at McMaster

Internationalization is crucial for McMaster, as it is for all universities. We recognize the urgent need on our campus for a comprehensive internationalized perspective that applies to our curriculum, program design, and research endeavours.

Humanities' Scientific Hub

A partnership built on mutual reciprocity and strength of research brings together the world-renowned Russell Archives, the Bertrand Russell Research Centre at McMaster and the Centre for Cognitive Sciences and Semantics at the University of Latvia. With this exceptional institutional synergy across the US, Canada, and Latvia, the collaboration seeks to create a scientific hub that will support leading-edge research and training in the history of analytical philosophy – one of the discipline's fastest growing specialties.

Internationalization through Art

Exploring internationalization through visual art, the School of the Arts, and the department of English and Cultural Studies co-curated an exhibition featuring works by indigenous artists from Australia, Canada, and the United States. The exhibition, a centrepiece for the international peer-reviewed conference, attracted 3600 visitors and included an artist talk by an internationally recognized indigenous artist.



Examining the Impact Of HIV

Demonstrable of our strengths and synergy across faculties, McMaster's internationalization efforts include HIV research across Social Sciences, Sciences and Health Sciences. Research projects in this area include investigating the effects of HIV on vision in South Africa, understanding the vulnerability to HIV in Chinese immigrants to Canada, and researching the correlates of immune protection on exposed uninfected infants in South Africa and Nigeria. Additional studies have focused on the awareness of HIV status and condom use of HIV-infected couples in Swaziland, Zambia and Zimbabwe, and strengthening the health system at a macro level in Uganda by improving health sector Priority Settings of H1N1, HIV, and prenatal conditions.



Innovation in Learning

To face emerging challenges in globalization, we recognize the importance of cross-border education delivery with partners who share our vision of innovation in higher education.



Preparing the Global Workforce

McMaster has joined forces with Maastricht University in the Netherlands to develop an innovative, collaborative learning program in global health that prepares the next generation of professionals for the global workforce. Launched in 2010, the Master of Science in Global Health brings together faculties of Social Sciences, Health Sciences, Business and Humanities, and links with partner universities in India and Thailand for a truly international experience.

Graduates gain the applied skills and relevant experience required for leadership careers within key international health organizations, government and non-government agencies, and the private sector: collaboration, self-management, cross-cultural intuition, and incisive decision-making.

The program's Global Advisory Board is made up of leaders from the business world, international NGOs and healthcare consultancies as far-spread as Japan, Africa and Switzerland – with Her Royal Highness Princess Margriet of the Netherlands as Honorary Chair.



Evolving towards Internationalization

The School of Rehabilitation Sciences' Physiotherapy and Occupational Therapy programs have dynamically evolved their curricula to respond to the internationalization of higher education. Educational research has involved gathering insight from student therapists to examine the benefits of the international clinical practicum and explore strategies for future implementation. Students have already gained hands-on learning opportunities in diverse communities as far reaching as Bhutan, Germany, India, Kenya, Mauritius, Tanzania, the UK, and the USA.

Working locally, faculty in the School of Rehabilitation Sciences are supporting the transition of internationally educated occupational therapists into practice in Canada. The Occupational Therapy Education and Practice Preparation Program (OTepp) prepares students for the national examination with the Canadian Association of Occupational Therapists.

A Network of Training and Exchange

The Erasmus Mundus Student Exchange Network in Auditory Cognitive Neuroscience is a collaborative project from Psychology, Neuroscience and Behaviour, and Electrical and Computer Engineering. The program involves alliances with institutions in Canada, Finland, France, Germany, the UK and the US. It provides financial awards to graduate students, postdoctoral scholars, research staff, and faculty for exchanges between partner institutions in Europe and North America that are involved in auditory cognitive neuroscience research. In addition, participants can take part in organized student workshops and colloquia in relevant research topics.

Working with partners across the EU, the department of Electrical and Computer Engineering has performed extensive research, along with graduate and postdoctoral training on hearing impairment and the effects of cochlear implants.





Engaging with Communities

Global issues including poverty, human rights, health and justice require a form of global responsibility. As a globally engaged university, we have made significant contributions with institutions in the US, the UK, France, Germany, and Australia, but our reach extends to communities across the world.

Helping to Rebuild a Country

Since the earthquake struck the country of Haiti, McMaster faculty have made efforts to scale-up human resources for health, working with Haitians to rebuild their country. Departments across the Faculty of Health Sciences have been working in Haiti on exemplary projects such as relief and organizational rebuild of a hospital in Port au Prince, as well as plastic surgery outreach, evaluation of the World Food Program, and enhancing nursing education and practice through joint planning of Canada-Haiti academic projects.



The Business of Engagement

The DeGroot School of Business is building a strong presence in Singapore, working on research involving multiplex networks and acquisitions and investigating how outside directors serve the functions of managerial monitoring and resource provision in different systems of corporate governance.

Immigration, Governments and Workplaces

The Department of Anthropology is exploring alternative models of culture, especially artistic and political culture, emerging in post-socialist conditions in Eastern Europe. Another study is examining conflicts among governments, conservationists and indigenous peoples, taking the commonalities and synergies of local to global with the US and France. Meanwhile, the department of Political Science is investigating the role of integration policies and practices in transitioning skilled immigrants into the workplace in Australia and Canada.

Health Research across Borders

Seeking groundbreaking results in breast cancer research, colleagues in Barbados, Nigeria and North America are connecting with McMaster's Faculty of Science researchers to investigate breast cancer biomarkers in women of African ancestry, while the Faculty of Engineering are partnering with institutions in Germany, Norway, Austria, and Poland to develop a mass screening breast cancer prevention tool for those at risk.

The world's vulnerable populations have been a key priority for the Faculty of Health Sciences, which has been focused on efforts to increase maternal and child health, and reduce child mortality and the spread of communicable diseases. A snapshot of exemplary health research projects include evaluating campaigns of mass distribution in Nigeria involving long-lasting insecticidal nets and children with malaria, and assessing the association of infant mortality with those living in urban slums in low-and middle-income countries. Similarly, faculty in Civil Engineering are working with marginalized communities, exploring tools and methodologies to assess water security - a vital project given the link between health and the availability of clean drinking water.

Additional highlights from faculty in the Health Sciences include their partnership with the Canadian Red Cross for two international research projects in Africa and the extensive health related research in the occupied Palestinian territories, teaming up with universities, both locally and internationally.



Encouraging Collaboration - Locally, Globally

Global problems require communication and coordination across disciplines, as well as collaboration between universities, governments, private organizations and communities worldwide. Today, collaboration within and beyond faculty borders at McMaster is evidenced by over 30 international projects that span various departments and schools.

Social Services in Societies

Themes of 'global labour' and 'global social policy' are threaded throughout the collaborative work of the Faculty of Social Sciences. The schools of Labour Studies and Social Work, for example, are currently exploring the ways that non-profit social services are being restructured in four countries with similar approaches to social services: Canada, Australia, Scotland and New Zealand. This study investigates changing ideas about how society takes care of those in need of support, and the ways that these ideas get translated into funding levels, agency structures and ways of managing, working in and receiving services.

International Collaboration meets Internal Communication

The majority of international activities within the Faculty of Humanities involve internal cross-collaboration, while developing and sustaining mutually beneficial connections with local and global communities – one of McMaster's fundamental operating principles.

The Faculty of Social Sciences' Department of Health, Aging and Society, and the Gilbrea Centre for Health and Aging, brought together an international network of researchers from across Australia, France, Ireland, the Netherlands, Sweden, the UK, and the USA to study aging. This network was initiated through a Social Sciences and Humanities Research Council (SSHRC) grant.



Moving Forward. Reaching Further.

The inventory of engagements highlighted in the International Compendium 2014 is evidence that McMaster faculty and staff are taking higher education to a global level, and putting internationalization at the heart of our efforts.

We are connecting with communities, both locally and internationally. We are forging alliances within the university, and with institutions and organizations worldwide. And, as we further our reputation as a research-focused, student-centred university that educates for capability, we are successfully integrating globalization into the McMaster experience.

The Research Process

The International Compendium 2014 provides a snapshot of McMaster's global activities worldwide. This inventory of international collaborations and activities demonstrates our efforts to strengthen internationalization at McMaster, and address the fundamental principles of *Forward with Integrity: Emerging Landscapes*.

Internationalization has gained momentum worldwide, affecting the way in which higher education is viewed and views itself. Knight (2004) defines internationalization as 'The process of integrating an international, intercultural, or global dimension in the purpose, functions or delivery of post-secondary education' (p. 11). This process is at the core of McMaster's strategic priorities in becoming a truly global university, and underpins the conceptual framework for the International Compendium.

The International Compendium 2014 is the second review of international activities compiled to date. The first review in 2009 was similar in design and scope. We compiled the international activities across campus over a four-year period, and assessed how they were being communicated internally, between departments, faculties and researchers, and globally, with institutions, communities and cultures. With this edition, we showcase the skill and talent of our global leaders in research and education and commit wholeheartedly to advancing internationalization.

Dr. Andrea Baumann
Associate Vice-President, Global Health

Reference

Knight, J., 2004. Internationalization Remodeled: Definition, Approaches, and Rationales. *Journal of Studies in International Education*, 8(1), pp.5-31. Available: <http://jsi.sagepub.com/cgi/doi/10.1177/1028315303260832>

Gathering Data

The international collaborative project survey asked faculty to identify the type of activity in which they were engaged, whether through education, research and/or global partnerships. Additionally, the survey included an indicator to track team collaboration among staff, postdoctoral fellows, graduate and undergraduate students within and across faculties/departments.

The data collection process for the 2013 survey employed the methodology from the original survey. The survey included a letter to deans, chairs and directors with the international collaborative project template for distribution to faculty across campus on May 2, 2013 to track international activities from 2009-2013, and imposed a deadline of May 31, 2013 for all survey submissions. An additional email was circulated to McMaster vice-presidents, associate vice-presidents and Internationalization Task Force members to inform them of the impending survey taking place and requesting participation from all faculty across campus.

An Immediate Response

With a high and almost immediate response rate, faculty returned a total of 305 international project summaries via email from May, 2013 -August, 2013. Survey researchers initiated respondent validation over email and follow-up telephone call, and sent faculty three additional emails:

- A reminder of the deadline date approaching
- Notification to those with lack of representation in the Compendium to date
- A final call for survey completion

Researchers have saved electronic copies of all international project submissions, filed under each department in the corresponding faculty. Each project has been catalogued in an electronic database of seven matrices by the following criteria:

- Master log
- Total number by country/department
- Projects by country
- Projects by department
- Projects by researcher
- Projects by category
- Project summary

The master log matrix includes the name, faculty, department, and contact details for each individual researcher at McMaster University, along with the title of the project and the countries and institutional partnership affiliations. Three of the matrices expose projects according to the corresponding departments and country affiliations. Projects by researcher outline all projects submitted by each individual faculty member. Projects by category reveal partnerships according to education, research, and/or global partnerships. The final matrix outlines the total number of projects within each department.



Thematic Analysis

A thematic analysis revealed that McMaster is represented on five continents – Asia, Africa, the Americas, Europe and Oceania. Faculty are involved in activities in 139 countries, with a global reach of over 1250 partnerships worldwide. Similarly to the 2009 compilation, global engagement is most prominent with the United States, followed by the UK, Germany, France, Australia and India.

■ RESEARCH

With McMaster's renowned dedication to research excellence, it is not surprising that the majority of McMaster's global participation is through research-based activities, considerably higher than educational-based partnerships and global partnerships. A combination of the aforementioned sub-categories makes up the difference.

■ INTERNATIONALIZATION, GLOBAL ENGAGEMENT AND COLLABORATION

Internationalization is represented across campus, with all six faculties represented in the data. Global engagement has taken on new meaning at McMaster University, with the trend of collaborative teamwork emerging from the data. Faculty submitted 34 international projects with two or more departments involved in their collaboration.

The theme of collaborative teamwork is threaded throughout the international projects on-campus and is evident in the complexities of partnerships at McMaster. It tells a story about how faculty across campus have cultivated relationships and supported global partnerships worldwide. Some activities are exemplary of the work at McMaster – long-standing relationships resulting from years of cultivation and mutual reciprocity. Others are initial, short-term relationship-building partnerships.

Moving Forward with Integrity: Internationalization at McMaster

More than ever, McMaster must seek leadership in global higher education, and commit to internationalization to meet the demands of the global community. President Deane's letter to the community, *Forward with Integrity*, makes clear that it is critical for McMaster to fully incorporate a global dimension into the student experience, engagement with the community, and research capacity. The International Compendium shows a breadth of international research and involvement with communities, both local and global. What it does not seek to do is outline the breadth of student experiences at McMaster. The Compendium 2014 focuses specifically on the coordination and communication of faculty through research, education and global partnership, and identifies internationalization activities through research, community and experiences.

Partnerships at McMaster demonstrate a myriad of ways in which our faculty are working together with institutions, researchers, cultures abroad, and within our own community.

The organogram on the next page illustrates how these intricate relationships work together to expand our international reach. As globalization has broadened and dissolved boundaries the world over, it has also enriched the way our faculty have crossed borders. No longer working in departmental silos, McMaster faculty have adapted a transdisciplinary approach to the way they foster global citizenship and global awareness.

In the following pages, the Compendium organizes faculty working abroad into alphabetical order according to faculty and department/schools.



Internationalization Organogram:

Working together. Shaping our future.



DeGroote School of Business



DEPARTMENT OF HUMAN RESOURCES

PROJECT CATEGORY: RESEARCH
HUMAN RESOURCES

“Voices at Work: Legal Effects on Organisation, Representation and Negotiation”

“Voices at Work: Legal Effects on Organisation, Representation and Negotiation”, is an international research collaboration organized by Alan Bogg of Oxford and Tonya Novitz of the University of Bristol in the UK. It began in 2011 and was funded by the Leverhulme Trust. The object of the project was to investigate the intersection between law and worker voice in a sample of industrialised English speaking common law countries, namely Australia, Canada, New Zealand, United Kingdom, and United States of America. Over sixty academics from these countries agreed to participate in this research project. A series of events intended to enable exchange of views between academics, labour lawyers, government representatives, trade unions, employers’ organisations and other policy actors were organized. The first of these events was held at Wadham College, Oxford on 29-30 July 2011. Subsequent events were held at York University, Toronto (March 2012) and at Melbourne University, Australia (July 2012). A final event, based on our preliminary findings in the project, aimed at policy-makers as well as academics is to be held at Oxford in June, 2013.

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| Collaborating Countries | Australia, Canada, New Zealand, UK, USA |
| Collaborating Institutions | Oxford, Cambridge, Victoria Univ. New Zealand, Glasgow, New York Univ., King’s College London, Univ. of Illinois, Monash Univ., Fordham Univ., Warwick Univ., Univ. of Melbourne, Deakin Univ., Boston College, LSE, Leicester, Bristol, Auckland, Otago, York Univ., McMaster, McGill, Univ. of Toronto, Univ. of Montreal, Rutgers Univ., and Univ. of Calgary. |
| Researcher/Project Coordinator | Roy J. Adams (professor emeritus) - adamsr@mcmaster.ca |

DEPARTMENT OF STRATEGIC MANAGEMENT

PROJECT CATEGORY: RESEARCH
STRATEGIC MANAGEMENT

Subnational Institutions, Entrepreneurial Linkages, and Innovation Performance in an Emerging Economy : A Multilevel and Contingency Approach

This study offers a model that explains the influence of sub-national market-supporting institution on emerging market firm’s innovation and how such impact is contingent on firms’ political capital and business capital. It is under preparation for submission to Strategic Management Journal.

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| Collaborating Countries | Hong Kong, China |
| Collaborating Institutions | CUHK Business School, Chinese University of Hong Kong |
| Researcher/Project Coordinator | Hongjin Zhu - zhuhongjin@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
STRATEGIC MANAGEMENT

Portfolio of Political Ties and Firm Strategy in an Emerging Economy

This study examines how the political ties that a firm maintains with rival political parties can affect its strategic decisions. Focusing on the firm’s portfolio of ties as opposed to dyadic ties, we offer a novel contingency model that specifies how the strategy influence of political ties varies with the results of party competition for political power in democratic emerging economies. It has been revised and resubmitted for the 2nd round review at Administrative Science Quarterly.

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| Collaborating Countries | Singapore |
| Collaborating Institutions | NUS Business School, National University of Singapore |
| Researcher/Project Coordinator | Hongjin Zhu - zhuhongjin@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
STRATEGIC MANAGEMENT

Complementarities in Institutions, Director Capital, and Director Behaviours: A Contingency Model of Outside Directors' Efficacy

This is a conceptual study that investigates how outside directors serve the functions of managerial monitoring and resource provision in different systems of corporate governance. Rather than viewing outside directors as functioning independently in the context of organizational environment, we conceptualize them as an element of bundles of related corporate government practices, including governance practices at national level (e.g., the legal system and capital markets), and at firm level (such as various types of controlling shareholders). This study has been revised and resubmitted for the 3rd round review at Corporate Governance: An International Review.

Collaborating Countries Singapore

Collaborating Institutions Lee Kong Chian School of Business, Singapore Management University; Faculty of Law Business and Creative Arts, James Cook University

Researcher/Project Coordinator Hongjin Zhu - zhuhongjin@mcmaster.ca

PROJECT CATEGORY: RESEARCH
STRATEGIC MANAGEMENT

Government Officials as Outside Directors: The Effect of Director Identification on Monitoring and Resource Provision

This study examines the effects of director's incentive through identification with the focal firms and their ability, which is determined by their human and social capital, on their boardroom behaviours. It has been revised and resubmitted to Strategic Journal of Management.

Collaborating Countries Singapore

Collaborating Institutions Lee Kong Chian School of Business, Singapore Management University

Researcher/Project Coordinator Hongjin Zhu - zhuhongjin@mcmaster.ca

PROJECT CATEGORY: RESEARCH
STRATEGIC MANAGEMENT

Where Can Capabilities Come From? Network Ties and Capability Acquisition in Business Groups

This research project examines how firms' multiplex network ties in business groups represent one important source of capability acquisition. It has been published in the Strategic Journal of Management in 2011.

Collaborating Countries The U.S and Singapore

Collaborating Institutions Kellogg School of Management, Northwestern University; NUS Business School, National University of Singapore

Researcher/Project Coordinator Hongjin Zhu - zhuhongjin@mcmaster.ca

PROJECT CATEGORY: RESEARCH
STRATEGIC MANAGEMENT

Explaining Whole Network Performance: The Role of Centralization in Business Groups

This is an ongoing research project that explores how the overall network structure influences whole network performance.


Collaborating Countries The U.S and Singapore

Collaborating Institutions Carlson School of Management, University of Minnesota; NUS Business School, National University of Singapore

Researcher/Project Coordinator Hongjin Zhu - zhuhongjin@mcmaster.ca



Faculty of Engineering



Faculty of Engineering

DEPARTMENT OF CHEMICAL ENGINEERING

PROJECT CATEGORY: RESEARCH
CHEMICAL ENGINEERING

Polymer Reaction Engineering

Co supervise graduate students working on fundamental issues in the areas of polymer reaction engineering. The collaboration has resulted in publication of high quality papers

Collaborating Countries China

Collaborating Institutions Zhejiang University, Chemical Engineering

Researcher/Project Coordinator Shiping Zhu - zhuship@mcmaster.ca

DEPARTMENT OF CIVIL ENGINEERING

PROJECT CATEGORY: RESEARCH
CIVIL ENGINEERING

Water Quality Assessment in Rural, Remote and otherwise Marginalized Communities.

This project aims to develop tools and methodologies to empower rural, remote, and otherwise marginalized communities to assess their water security. This assessment is a first step towards developing interventions to improve water security. As such, this project is a part of two much larger UNU-INWEH projects that address water and health in rural, remote and otherwise marginalized communities. The project titles are KAPE and HydroSanitas.

Collaborating Countries Kenya & Uganda

Collaborating Institutions Kenyan Medical Research Institute
Ugandan Christian University

Researcher/Project Coordinator Sarah Dickson - sdickso@mcmaster.ca
Corinne Schuster-Wallace - Corinne.SchusterWallace@unu.edu

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

PROJECT CATEGORY: RESEARCH
ELECTRICAL AND COMPUTER ENGINEERING

Neural Representation of Cochlear Implant Stimulation

This group in Melbourne is collecting neurophysiological data in an animal model of cochlear implant stimulation. The group at McMaster is performing advanced data analysis and computational modeling of this data.

Collaborating Countries Australia, Canada

Collaborating Institutions The Bionics Institute, Melbourne, AUSTRALIA

Researcher/Project Coordinator Ian C. Bruce - ibruce@ieee.org

PROJECT CATEGORY: RESEARCH
ELECTRICAL AND COMPUTER ENGINEERING

Neural Modeling of the Auditory System: Neural Circuits and Applications to Cochlear Implants

This is an ongoing collaboration on the development of computational models of neural circuits in the auditory systems of the brain, as well as applying auditory models to improved speech processing strategies for cochlear implants.

Collaborating Countries Australia

Collaborating Institutions The University of Melbourne, AUSTRALIA

Researcher/Project Coordinator Ian C. Bruce - ibruce@ieee.org

PROJECT CATEGORY: EDUCATION/RESEARCH
ELECTRICAL AND COMPUTER ENGINEERING

ICanHear: Improved Communication through Applied Hearing Research European Union Marie Curie Initial Training Network

The program provides training for graduate students and postdoctoral fellows in hearing aid and cochlear implant research in the EU labs. Dr. Bruce is an external member of the training network's advisory board, and McMaster has been invited to be an Associated Partner for secondment of trainees.

Collaborating Countries Germany, Belgium, United Kingdom, Switzerland, Denmark

Collaborating Institutions Ruhr-Universität Bochum, GERMANY
Katholieke Universiteit Leuven, BELGIUM
University of Southampton, UK
Universität Zürich, SWITZERLAND
Danmarks Tekniske Universitet (DTU), DENMARK

Researcher/Project Coordinator Ian C. Bruce - ibruce@ieee.org

PROJECT CATEGORY: RESEARCH
ELECTRICAL AND COMPUTER ENGINEERING

Enhancement of Onsets in the Speech Envelope Can Improve Speech Intelligibility in Hearing Impaired Listeners

This group in Leuven has developed a novel speech processing algorithm for hearing aids and has collected human speech perception data showing that it gives improved intelligibility over conventional hearing aid amplification in some situations. Dr. Bruce at McMaster is using his models of the auditory periphery to demonstrate the neural basis for this improved perception.

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| Collaborating Countries | Belgium |
| Collaborating Institutions | Katholieke Universiteit Leuven, BELGIUM |
| Researcher/Project Coordinator | Ian C. Bruce - ibruce@ieee.org |

PROJECT CATEGORY: RESEARCH
ELECTRICAL AND COMPUTER ENGINEERING

Prediction of Speech Intelligibility in Noise for Hearing Impaired Listeners

For her doctoral work supervised by Profs. Lorenzi and Moore, Dr. Léger collected speech perception data in different forms of background noise in human listeners with different degrees of hearing loss. The group at McMaster is using their models of the peripheral auditory system to explain the neural basis for the speech intelligibility data.

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| Collaborating Countries | France, United Kingdom, USA |
| Collaborating Institutions | École normale supérieure, Paris, FRANCE University of Cambridge, UK Massachusetts Institute of Technology, USA |
| Researcher/Project Coordinator | Ian C. Bruce - ibruce@ieee.org |

PROJECT CATEGORY: RESEARCH
ELECTRICAL AND COMPUTER ENGINEERING

Computational Models of the Auditory Periphery

Ongoing collaboration on development of computational models of the normal and impaired mammalian auditory periphery Prof. Carney is also an Adjunct Professor in the ECE department at McMaster and serves on supervisory committees of some of Dr. Bruce's students.

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| Collaborating Countries | USA, Malaysia |
| Collaborating Institutions | University of Rochester, NY, USA University of Malaya, Kuala Lumpur, MALAYSIA |
| Researcher/Project Coordinator | Ian C. Bruce - ibruce@ieee.org |

PROJECT CATEGORY: RESEARCH
ELECTRICAL AND COMPUTER ENGINEERING

Robust Beamforming on a Riemannian Manifold

Development of robust beamforming algorithms for wireless communications based on the concept of Riemannian distance.

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| Collaborating Countries | Germany |
| Collaborating Institutions | FG Nachrichtentechnische Systeme Institut für Nachrichtentechnik Technische Universität Darmstadt Germany |
| Researcher/Project Coordinator | Kon Max Wong - wong@mail.ece.mcmaster.ca |

PROJECT CATEGORY: RESEARCH
ELECTRICAL AND COMPUTER ENGINEERING

Detection of Signals for Sensor Arrays

Development of high precision algorithms for the detection of signals using sensor arrays under low signal to noise ratios.

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| Collaborating Countries | Scotland, UK |
| Collaborating Institutions | Institute for Digital Communications, University of Edinburgh |
| Researcher/Project Coordinator | Kon Max Wong - wong@mail.ece.mcmaster.ca |

PROJECT CATEGORY: RESEARCH
ELECTRICAL AND COMPUTER ENGINEERING

Synthesis of Ultrasound and Microwaves for Multimodal Breast Cancer Screening

Development of a prototype for multi-modal breast cancer detection based on microwave and acoustic technologies. The general goal is an efficient tool for breast-cancer prevention via mass screening of the population at risk (women above the age of 50 or younger women with higher risk of developing breast cancer).

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| Collaborating Countries | Germany, Norway, Austria, Poland |
| Collaborating Institutions | Goethe University Frankfurt, Germany University of Oslo + Norwegian Univ. of Science and Technology University of Siegen, Germany Medical University of Vienna, Austria Wroclaw University of Technology, Poland |
| Researcher/Project Coordinator | Natalia K. Nikolova - talia@mcmaster.ca |

Faculty of Engineering

PROJECT CATEGORY: RESEARCH
ELECTRICAL AND COMPUTER ENGINEERING

Integrated Photonic and Optoelectronic Devices

Development of integrated photonic and optoelectronic devices for fiber-optic communication systems: my research activities in this area needs significant investment on facility, equipment, and testing instruments; while it is hard to find sufficient domestic resources in Canada to support the physical realization of my designs, the Chinese government sponsored a "Thousand Talent Program" under which I managed to get the required funding that has been helping me to conduct experiments in my device development.

Collaborating Countries China

Collaborating Institutions Wuhan National Laboratory for Optoelectronics (WNLO), Huazhong University of Science and Technology (HUST)

Researcher/Project Coordinator Xun Li - lixun@mcmaster.ca

DEPARTMENT OF ENGINEERING PHYSICS

PROJECT CATEGORY: RESEARCH
ENGINEERING PHYSICS

Development of Single Photon Avalanche Detectors for Use in Silicon Photonic Circuits

The aim of the project is to develop Si-Ge hybrid detectors suitable for avalanche detection of 1550nm in silicon photonic circuits; and ultimately the ability to detect single photon in these detectors.

Collaborating Countries Scotland, United Kingdom

Collaborating Institutions Heriott-Watt University

Researcher/Project Coordinator Andrew Knights - aknight@mcmaster.ca

PROJECT CATEGORY: RESEARCH/GLOBAL PARTNERSHIP
ENGINEERING PHYSICS

Indo-Canadian Symposium on Nano-Science and Technology

A joint workshop designed to explore opportunities for future collaborative projects.

Collaborating Countries India

Collaborating Institutions GLeads: McMaster, National Institute for Engineering (India) Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) Indian Institute of Science Indian Institute of Technology (Madras) Davanagere University University of Mysore

Researcher/Project Coordinator Peter Mascher - mascher@mcmaster.ca

PROJECT CATEGORY: EDUCATION
ENGINEERING PHYSICS

Toward a New Era of Nuclear Energy: Messages from Fukushima

To recognize the ethics and responsibility of engineers not only in the engineering and technology but also to the public and society. To understand the wideness and deepness of nuclear engineering. To make friendship among the graduate students of the University of Tokyo and Fukushima University, the nuclear engineers in Japan and the graduate students of McMaster University.

Collaborating Countries Japan

Collaborating Institutions Japan Atomic Energy Agency, Fukushima City, Fukushima University, Hitachi-GE, The University of Tokyo

Researcher/Project Coordinator Shinya Nagasaki - nagasas@mcmaster.ca

PROJECT CATEGORY: RESEARCH
ENGINEERING PHYSICS

Fast, Affordable, Easy-to-use TB and MDR-TB Handheld Tester for Use in Poor Resource Settings

Development of a handheld and solar-rechargeable device for the rapid diagnosis of tuberculosis and its drug resistant variations in resource-poor areas.

Collaborating Countries India

Collaborating Institutions University of Mysore

Researcher/Project Coordinator Leyla Soleymani - soleyml@mcmaster.ca

PROJECT CATEGORY: RESEARCH
ENGINEERING PHYSICS

Interfacial Adhesion in Organic Solar Cells

Examination of the adhesion and cohesion strength of various organic and inorganic components using in organic solar cells, using specially developed adhesion testing equipment. A comparison of approaches is used to determine a quantitative relationship between mechanical properties of the thin films and the electrical properties of devices.

Collaborating Countries Netherlands

Collaborating Institutions Wageningen University

Researcher/Project Coordinator Ayse Turak - turaka@mcmaster.ca

Faculty of Engineering

PROJECT CATEGORY: RESEARCH
ENGINEERING PHYSICS

Enhanced White Organic Light Emitting Diodes

Modification of electrodes and organic molecules for high efficiency white organic light emitting diodes.

Collaborating Countries South Korea

Collaborating Institutions Hoseo University

Researcher/Project Coordinator Ayse Turak - turaka@mcmaster.ca

PROJECT CATEGORY: RESEARCH
ENGINEERING PHYSICS

Electrode modification in Organic Solar Cells

Using solution processing approaches, modification of electrodes in organic photovoltaic devices is possible. Work function, electric field, injection and light coupling tuning is possible using a dispersed array of nanoparticles.

Collaborating Countries Turkey

Collaborating Institutions Sabanci University

Researcher/Project Coordinator Ayse Turak - turaka@mcmaster.ca

SCHOOL OF ENGINEERING TECHNOLOGY

PROJECT CATEGORY: GLOBAL PARTNERSHIP
ENGINEERING TECHNOLOGY

Portable Assisted Mobility Device 2012 – 2014 Global PACE Project

Design and manufacture of a portable assisted mobility device. Eight team representing 32 universities from 12 countries will compete after two years of collaboration for the best final product.

Collaborating Countries Canada, Mexico

Collaborating Institutions OUIT, Oshawa, Ontario, Canada
ITESM Monterrey, Mexico
ITESM Toluca, Mexico

Researcher/Project Coordinator Dan Centea - centeadn@mcmaster.ca

DEPARTMENT OF MATERIALS SCIENCE & ENGINEERING

PROJECT CATEGORY: RESEARCH
MATERIALS SCIENCE & ENGINEERING

Fundamental Study of a Duplex Beta-Alumina Electrolyte

Sodium-sulfur batteries are used for large scale electrical storage (>250 kWh) in Korea and Japan. The electrolyte is a sodium aluminate ceramic, typically 1-2 mm thick that accounts for a significant power loss. The goal of this project is to decrease the power loss by developing a porous/dense duplex ceramic with thin film electrolyte. This is a one year project (2013) funded by RIST.

Collaborating Countries Canada, South Korea

Collaborating Institutions McMaster-RIST (Research Institute of Industrial Research & Technology)

Researcher/Project Coordinator Anthony Petric - petric@mcmaster.ca

PROJECT CATEGORY: EDUCATION
MATERIALS SCIENCE & ENGINEERING

McMaster - INP Grenoble Student Exchange

Each year 4 to 6 French students come to McMaster to work from May-August and study from September to December. An equal number of McMaster Students go to France to work and study over the same period.

Collaborating Countries France

Collaborating Institutions Institut National Polytechnique de Grenoble (INP Grenoble)

Researcher/Project Coordinator Hatem S. Zurob - zurobh@mcmaster.ca



Faculty of Health Sciences



DEPARTMENT OF ANESTHESIA

PROJECT CATEGORY: RESEARCH
ANESTHESIA

Opioids for chronic non-cancer pain: a protocol for a systematic review of randomized controlled trials

We propose to conduct a systematic review and meta-analysis of randomized controlled trials to summarize the evidence for use of opioids to treat chronic non-cancer pain.

Collaborating Countries Switzerland, Norway, China, Colombia, Brazil, USA

Collaborating Institutions Academy of Swiss Insurance Medicine, University Hospital Basel, Basel, Switzerland
Institute of Clinical Epidemiology and Biostatistics, University Hospital Basel, Basel, Switzerland
Norwegian Knowledge Centre for the Health Services, Oslo, Norway
Accident and Emergency Department, Tseung Kwan O Hospital, Hong Kong, China
Accident and Emergency Department, Tuen Mun Hospital, Hong Kong, China
Department of Anesthesia and Pain Medicine, Hospital for Sick Children, Toronto, Canada
Institute for Health Policy, Management and Evaluation, University of Toronto, Toronto, Canada
Department of Dentistry, Santo Tomas University, Bogota D.C., Colombia
Li Ka Shing Knowledge Institute, St. Michael's Hospital, Toronto, Canada
Pharmaceutical Sciences Post graduate Course, University of Sorocaba, UNISO, Brazil
Accident and Emergency Department, Pamela Youde Nethersole Eastern Hospital, Hong Kong, China
Department of Outcomes Research, Cleveland Clinic, Cleveland, OH, USA

Researcher/Project Coordinator Jason Busse - j.busse@rogers.com

PROJECT CATEGORY: RESEARCH
ANESTHESIA

Systematic Review and Network meta-analysis of Interventions for Fibromyalgia: A protocol

Fibromyalgia is associated with substantial socioeconomic loss and, despite considerable research including numerous randomized controlled trials (RCTs) and systematic reviews, there exists uncertainty regarding what treatments are effective. No review has evaluated all interventional studies for fibromyalgia, which limits attempts to make inferences regarding the relative effectiveness of treatments.

Collaborating Countries Argentina, Netherlands, USA, Poland

Collaborating Institutions Canadian Memorial Chiropractic College, Toronto, Ontario, Canada
Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada
University of Regina, Regina, Saskatchewan, Canada
School of German Hospital, Buenos Aires, Argentina
Academic Medical Center, Amsterdam, The Netherlands
Ontario Chiropractic Association, Toronto, Ontario, Canada
The Institute for Work & Health, Toronto, Ontario, Canada
Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada
Vancouver Hospital, Vancouver, British Columbia, Canada
Knowledge and Evaluation Research Unit, Divisions of Endocrinology and Diabetes and Health Care and Policy Research, Mayo Clinic, Rochester, Minnesota, USA
2nd Department of Internal Medicine, Jagiellonian University Medical College, Kraków, Poland
Polish Institute of Evidence Based Medicine, Kraków, Poland

Researcher/Project Coordinator Jason Busse - j.busse@rogers.com

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Trial to Re-evaluate Ultrasound in the Treatment of Tibial Fractures (T.R.U.S.T.): A Multicentre Randomized Pilot Study

Tibial fractures are associated with a prolonged recovery period. While results of a number of small randomized trials have suggested that low-intensity pulsed ultrasound (LIPUS) accelerates fracture healing, inferences about functional gains remain weak. The purpose of the present pilot randomized trial was to assess the feasibility of a definitive trial to determine the effect of LIPUS on functional and clinical outcomes in operatively treated tibial shaft fractures.

Collaborating Countries USA, China

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| Collaborating Institutions | Institute for Work & Health, Toronto, Ontario, Canada, Department of Orthopedic Surgery, Boston University Medical Center, Boston, USA Department of Orthopedic Surgery, Dartmouth-Hitchcock Medical Center, Lebanon, NH, USA Department of Orthopaedics & Traumatology, the Chinese University of Hong Kong, Hong Kong, China Division of Orthopedic Surgery, University of Toronto, Toronto, Canada |
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| Researcher/Project Coordinator | Jason Busse - j.busse@rogers.com |
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PROJECT CATEGORY: RESEARCH

ANESTHESIA

The effect of dipeptidyl peptidase-4 inhibitors on cardiovascular outcomes in the treatment of type 2 diabetes mellitus: a systematic review and meta-analysis of randomized controlled trials

To review the current literature investigating the effects of dipeptidyl peptidase-4 inhibitors on the risk factors of cardiovascular disease

Collaborating Countries Finland, Brazil, Switzerland, Germany, China, USA, Poland, Chile, Spain

Collaborating Institutions

Center for Clinical Epidemiology and Evidence-based Medicine, Xinqiao Hospital, Third Military Medical University, Chongqing, China

Center for Health Research, Kaiser Permanente Northwest, Portland, Oregon, USA

2nd Department of Internal Medicine, Jagiellonian University Medical College, Krakow, Poland

Child Health Evaluative Sciences, Hospital for Sick Children Research Institute, Toronto, Ontario, Canada

Department of Anesthesia & Pain Medicine and the Institute for Health Policy, Management & Evaluation, University of Toronto

Evidence-Based Dentistry Unit, Faculty of Dentistry, Universidad de Chile

Internal Medicine Department, School of Medicine, Pontificia Universidad Católica de Chile, Santiago, Chile

Epidemiology Unit, Cardiology Department, Vall d'Hebron Hospital, Barcelona, Spain

CIBER de Epidemiología y Salud Pública (CIBERESP), Spain

Diabetes, Endocrinology and Nutrition Unit, IdIBGi Hospital Universitari de Girona Dr.Josep Trueta, Spain

CIBEROBN (CB06/03/010), Spain

Center for Pediatric Clinical Studies and Department of Neonatology, University Children's Hospital Tuebingen, Germany
Basel Institute for Clinical Epidemiology and Biostatistics, University Hospital Basel, Basel, Switzerland

Pharmaceutical Sciences Pos graduate Course, University of Sorocaba, UNISO, Brazil

Department of Urology, Helsinki University Central Hospital and University of Helsinki, Helsinki, Finland

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| Researcher/Project Coordinator | Jason Busse - j.busse@rogers.com |
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PROJECT CATEGORY: RESEARCH
ANESTHESIA

Epidemiology and Publication of Discontinued versus Successfully Completed Randomized Trials (DISCO study)

Randomized controlled trials (RCTs) may be discontinued because of apparent harm, benefit, or futility. Other RCTs are discontinued early because of insufficient recruitment. Trial discontinuation has ethical implications, because participants consent on the premise of contributing to new medical knowledge, Research Ethics Committees (RECs) spend considerable effort reviewing study protocols, and limited resources for conducting research are wasted. Currently, little is known regarding the frequency and characteristics of discontinued RCTs.

Collaborating Countries Switzerland, Germany, Finland, Lebanon, Spain, Italy, USA, Norway

Collaborating Institutions

Basel Institute for Clinical Epidemiology and Biostatistics, University Hospital of Basel, Hebelstrasse 10, 4031 Basel, Switzerland

Cochrane Switzerland, Institute of Social and Preventive Medicine (IUMSP), Lausanne University Hospital, Lausanne, Switzerland

German Cochrane Centre, Institute of Medical Biometry and Medical Informatics, University Medical Center, Berliner Allee 29, 79110 Freiburg, Germany

Institute of Social and Preventive Medicine, University of Zurich, Hirschengraben 84, 8001 Zurich, Switzerland

Department of Urology, Helsinki University Central Hospital and University of Helsinki, Helsinki, Finland

Department of Internal Medicine, American University of Beirut, Department of Internal Medicine, P.O. Box: 11-0236 Riad-El-Solh, Beirut 1107 2020, Lebanon

Department of Neonatology and Center for Pediatric Clinical Studies, University Children's Hospital, Calwerstr. 7, 72076 Tuebingen, Germany

Epidemiology Unit, Department of Cardiology, Vall d'Hebron Hospital and CIBER de Epidemiología y Salud Pública (CIBERESP), Passeig Vall d'Hebron 119-129, 08005 Barcelona, Spain

Centre de Recherche Clinique Étienne-Le Bel and Department of Medicine, Université de Sherbrooke, CHUS, 3001 12e avenue nord, Sherbrooke, PQ, Canada J1H5N4

IRCCS Orthopedic Institute Galeazzi, Via Riccardo Galeazzi, 4 20161 Milano, Italy

Department of Surgery, University Hospital Basel, Spitalstrasse 26, 4031 Basel, Switzerland

Collaborating Institutions

Academy of Swiss Insurance Medicine, University Hospital of Basel, Schanzenstrasse 55, 4031 Basel, Switzerland

Center for Health Research, Kaiser Permanente Northwest, Portland, OR, USA

Department of Medicine, Innlandet Hospital Trust-Division Gjøvik, Oppland, Norway

Department of Anesthesia & Pain Medicine, Hospital for Sick Children

Institute of Health Policy, Management and Evaluation, University of Toronto, Toronto, Ontario, Canada

Institute of Nuclear Medicine, University Hospital Bern, Freiburgstrasse 4, 3010 Bern, Switzerland

Researcher/Project Coordinator Jason Busse - j.busse@rogers.com

PROJECT CATEGORY: GLOBAL PARTNERSHIP/EDUCATION
ANESTHESIA

Haiti/St Joseph's Healthcare/McMaster University Medical Program

- Long standing resident exchanges for anesthesia training
- Took teaching team to demonstrate regional techniques for peripheral orthopedic surgery
- Ongoing work with groups

Collaborating Countries Haiti

Collaborating Institutions

Faculté de Médecine et de Pharmacie d'Haiti

Hopital Université d'Etat d'Haiti

Hopital Universitaire La Paix de Delmas

Ministère de la Santé et de la Population d'Haiti

Researcher/Project Coordinator Alezandre Dauphin - dauphina@mcmaster.ca

PROJECT CATEGORY: GLOBAL PARTNERSHIP/EDUCATION
ANESTHESIA

Uganda/ St Joseph's Healthcare/McMaster University Medical program

Long standing resident exchange program. Clinical training, infrastructure build-up. Obstetrical fellowship for Dr. Kintu.

Collaborating Countries Uganda

Collaborating Institutions

Mbarara University

Makerere University

Researcher/Project Coordinator Alezandre Dauphin - dauphina@mcmaster.ca

Faculty of Health Sciences

PROJECT CATEGORY: EDUCATION

ANESTHESIA

The Master Medicine in Anesthesia and Intensive Care Residency Training Program in Guyana

Assistance in developing the anesthesia residency training program in Guyana. Assistance in teaching the academic and clinical program Collaborating with other Canadian universities and the Canadian Anesthesiologists International Education Fund to provide training opportunities for Guyana trainees in specialty areas.

Collaborating Countries Guyana

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| Collaborating Institutions | University of Guyana Guyana Public Hospital Corporation |
| Researcher/Project Coordinator | Alezandre Dauphin - dauphina@mcmaster.ca Anne Wong - wongan@mcmaster.ca |

PROJECT CATEGORY: EDUCATION

ANESTHESIA

Anesthesia in Thailand & Canada: A Comparative Case Study of Two Residency Training Programs

The purpose is to understand the sociocultural influences that affect anesthesia education and practice by comparing residency programs in Thailand and Canada. Information gathered from each site will be used to understand and compare those aspects of anesthesia training that are "universal" and those that are socioculturally and historically influenced.

Collaborating Countries Thailand

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| Collaborating Institutions | University of Bangkok, Thailand |
| Researcher/Project Coordinator | Anne Wong - wongan@mcmaster.ca |

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Open-Label Evaluation of the Pharmacokinetic Profile and Safety of Tapentadol Oral Solution for the Treatment of Postsurgical Pain in Children and Adolescents Aged from 6 to less than 18 years

This is a multicenter, open-label (all people involved know the identity of the intervention), single-dose study to evaluate the pharmacokinetic (PK) profile (how drugs are absorbed in the body, how they are distributed within the body and how they are removed from the body over time), safety and tolerability of tapentadol 1 mg/kg oral solution (OS) in children aged from 6 to less than 18 years after scheduled surgical procedures that routinely produce acute, moderate to severe postsurgical pain.

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| Collaborating Countries | USA, France, Spain |
| Collaborating Institutions | Janssen sponsored study / Only cities listed |
| Researcher/Project Coordinator | Norman Buckley - buckley@mcmaster.ca |

PROJECT CATEGORY: RESEARCH

ANESTHESIA

The ENIGMA-II Trial: Nitrous Oxide Anesthesia and Cardiac Morbidity after Major Surgery: A Randomized Control Trial

To investigate the safety of nitrous oxide (N₂O) anaesthesia in patients with risk factors for coronary artery disease undergoing major surgery.

Collaborating Countries Australia, England, Hong Kong, Malaysia, New Zealand, Saudi Arabia, Singapore, Switzerland, Wales, United States of America

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| Collaborating Institutions | Australia: Alfred Hospital – Paul Myles Royal Melbourne Hospital – Kate Leslie St. Vincent's Hospital – Brendan Silbert The Austin Hospital – Phillip Peyton Royal Perth Hospital – Michael Paech Monash Medical Centre – Rod McRae Dandenong Hospital – Rick Bulach Geelong Hospital – Steve Bolsin Royal Prince Alfred Hospital – Tim McCulloch Westmead Hospital – Richard Halliwell Prince of Wales (NSW) – Steve Gatt Western Hospital – Andrew Jefferies Fremantle Hospital – Ed O'Loughlin, Volker Mitteregger New Zealand: Prince of Wales Hospital – Matthew Chan Auckland Hospital – Tim Short, Doug Cambell Christchurch – Ross Kennedy Middlemore – Stuart Walker United States of America: Cleveland Clinic/Hillcrest – Dan Sessler University of Louisville – Detlef Obal Beth Israel Deaconess Medical Center – Bala Subramaniam Singapore: Tan Tock Seng Hospital – Nelson Chua Malaysia: Hospital Kuala Lumpur – Zulkifly Ali Malaya Medical Centre – Wang Chew Yin Saudi Arabia: King Khalid University Hospital – Abdelazeem Eldawlatly |
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Faculty of Health Sciences

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| Collaborating Institutions | Europe: Geneva University Hospital Geneva, Switzerland – Guy Haller Plymouth Hospitals NHS Trust – Robert Sneyd University Hospitals of Morecambe Bay – Ian Parkinson Diana Princess of Wales Hospital – Shan Dharmarajah Royal Preston Hospital – Shondipon Laha North Devon District Hospital – Guy Rousseau Bradford Teaching Hospitals NHS Trust – Andrew Brennan Mid Staffordshire NHS Foundation Trust – Moses Chikungwa Hull and East Yorkshire Hospitals NHS Trust – Packianathaswamy Balaji Blackpool, Fylde & Wyre Hospitals NHS Foundation Trust – Jason Cupitt |
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| Researcher/Project Coordinator | Norman Buckley - buckley@mcmaster.ca Harsha Shanthanna - harshamd@gmail.com James Paul - james_paul@sympatico.ca Tomas VanHelder - tvanhelder@cogeco.ca |
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PROJECT CATEGORY: RESEARCH
ANESTHESIA

A randomized crossover study of a combination of controlled-release oxycodone and naloxone (OXN) and controlled-release oxycodone HCl tablets in patients with chronic non-cancer pain

The primary objective of this study is to assess the efficacy and safety of OXN compared to placebo in opioid-experienced subjects with moderate to severe pain due to chronic low back pain who require around-the-clock opioid therapy.

Collaborating Countries United States

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| Collaborating Institutions | Purdue Pharma sponsored study / Lists only cities |
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| Researcher/Project Coordinator | Norman Buckley - buckley@mcmaster.ca |
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PROJECT CATEGORY: RESEARCH
ANESTHESIA

A Randomized Comparison of Intraoperative Warming with the LMA PerfecTemp and Forced-Air

Recently, a novel posterior heating system has been developed that provides enhanced pressure relief: the Laryngeal Mask Airway (LMA) PerfecTemp. Anecdotal experience with this FDA-approved system suggests that the PerfecTemp warmer is effective, even in open abdominal surgery. The investigators therefore propose to test the hypothesis that intraoperative distal esophageal (core) temperatures with PerfecTemp warming are non-inferior to upper-body forced-air warming in patients undergoing open major abdominal surgery under general anesthesia.

Collaborating Countries United States

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| Collaborating Institutions | Cleveland Clinics, Cleveland, OH |
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| Researcher/Project Coordinator | James Paul - james_paul@sympatico.ca Desi Reddy - dreddy@cogeco.ca Madi Ali - madimadiali@yahoo.ca |
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PROJECT CATEGORY: RESEARCH
ANESTHESIA

Transfusion Triggers in Cardiac Surgery (TRICS-II): A Randomized Controlled Trial

This is a multi-centre randomized controlled pilot trial of two transfusion strategies in high risk patients having cardiac surgery. This study will be conducted in 7 Canadian centers and 1 American centre. Patients allocated to a “restrictive” transfusion strategy will receive a red cell transfusion if their hemoglobin is 75 g/L or less intraoperatively and postoperatively. Patients allocated to a “liberal” transfusion strategy will receive red cell transfusion if their hemoglobin concentration is 95 g/L or less intraoperatively and postoperatively in the intensive care unit, and less than 85 g/L on the ward.

Collaborating Countries United States

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| Collaborating Institutions | Virginia Commonwealth University |
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| Researcher/Project Coordinator | Summer Syed - syed@mcmaster.ca |
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PROJECT CATEGORY: RESEARCH

ANESTHESIA

Multivariable Risk Prediction Models: It's All about the Performance

The purpose of the risk adjustment is to try and create a level playing field for comparing healthcare providers so that hospitals with different case-mix can be fairly compared. Risk adjustment helps to disentangle variations in patient outcomes attributable to patient characteristics that are generally not under the control of the treating clinicians or healthcare provider from aspects such as quality of care, as well as unmeasured case-mix factors and any data errors.

Collaborating Countries England, United Kingdom**Collaborating Institutions** Centre for Statistics in Medicine, University of Oxford, Oxford**Researcher/Project Coordinator** Yannick Le Manach - yannick.le.manach.md@gmail.com

PROJECT CATEGORY: RESEARCH

ANESTHESIA

The prognostic value of preoperative and postoperative B-type natriuretic peptides (BNP and NT proBNP) in patients having noncardiac surgery; systematic review and individual patient data meta-analysis**Collaborating Countries** Australia, Poland, United Kingdom, Serbia, South Africa, Switzerland, USA, Italy**Collaborating Institutions** University Hospital Basil, Basil, Switzerland
Amore Health, United Kingdom
The Northern Hospital, Victoria, Australia
University of Oxford, United Kingdom
European Institute of Oncology, Milan, Italy
University of Sapienza, Rome, Italy
Pomeranian Medical University, Szczecin, Poland
University Hospital Berne, Switzerland
National Health Service, London, UK
University of Graz, Graz, Australia
University of Belgrade, Serbia
Texas Tech University Health Sciences Centre, Texas, US
Pirogow Provincial Specialist Hospital, Maratonka, Poland**Researcher/Project Coordinator** Yannick Le Manach - yannick.le.manach.md@gmail.com

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Central venous saturation is not an alternative to mixed venous saturation during cardiopulmonary bypass in coronary artery surgery patients.

To evaluate the correlation and agreement between central venous saturation (ScvO₂) and mixed venous saturation (SvO₂) during cardiopulmonary bypass.

Collaborating Countries Tunisia**Collaborating Institutions** Military Hospital, Tunis University**Researcher/Project Coordinator** Yannick Le Manach - yannick.le.manach.md@gmail.com

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Randomized Evidence for Reduction of Perioperative Mortality

With more than 220 million major surgical procedures performed annually, perioperative interventions leading to even minor mortality reductions would save thousands of lives per year. This international consensus conference aimed to identify all nonsurgical interventions that increase or reduce perioperative mortality as suggested by randomized evidence.

Collaborating Countries Italy, South Africa**Collaborating Institutions** Università Vita-Salute San Raffaele, Milan, Italy and Inkosi Albert Luthuli Central Hospital, Durban, South Africa**Researcher/Project Coordinator** Yanick Le Manach - yannick.le.manach.md@gmail.com

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Prognostic Significance of Blood Lactate and Lactate Clearance in Trauma Patients

Lactate has been shown to be a prognostic biomarker in trauma. Although lactate clearance has already been proposed as an intermediate endpoint in randomized trials, its precise role in trauma patients remains to be determined.

Collaborating Countries France**Collaborating Institutions** Centre Hospitalo-Universitaire (CHU) Pitié-Salpêtrière, Assistance Publique-Hôpitaux de Paris, Paris**Researcher/Project Coordinator** Yannick Le Manach - yannick.le.manach.md@gmail.com

Faculty of Health Sciences

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Prediction of Difficult Tracheal Intubation: Time for a Paradigm Change

It has been suggested that predicting difficult tracheal intubation is useless because of the poor predictive capacity of individual signs and scores. The authors tested the hypothesis that an accurate prediction of difficult tracheal intubation using simple clinical signs is possible using a computer-assist model.

Collaborating Countries France

Collaborating Institutions Université Pierre et Marie Curie-Paris, CHU Pitié-Salpêtrière, Paris, France.

Researcher/Project Coordinator Yannick Le Manach - yannick.le.manach.md@gmail.com

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Can changes in arterial pressure be used to detect changes in cardiac output during volume expansion in the perioperative period?

Cardiac output (CO) is rarely monitored during surgery, and arterial pressure remains the only hemodynamic parameter for assessing the effects of volume expansion (VE). However, whether VE-induced changes in arterial pressure accurately reflect changes in CO has not been demonstrated. The authors studied the ability of VE-induced changes in arterial pressure and in pulse pressure variation to detect changes in CO induced by VE in the perioperative period.

Collaborating Countries France, USA, Switzerland

Collaborating Institutions Centre Hospitalier Universitaire Pitié-Salpêtrière, Paris, France & Triemli City Hospital, Zurich, Switzerland & Hopital Louis Pradel, Lyon, France & Centre Hospitalier Universitaire de Lille, Lille, France & University of California, Irvine, California

Researcher/Project Coordinator Yannick Le Manach - yannick.le.manach.md@gmail.com

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Impact of Perioperative Bleeding on the Protective Effect of β -Blockers during Infra-renal Aortic Reconstruction

The use of β -blockers during the perioperative period remains controversial. Although some studies have demonstrated their protective effects regarding postoperative cardiac complications, others have demonstrated increased mortality when β -blockers were introduced before surgery.

Collaborating Countries France, United Kingdom

Collaborating Institutions Pitié-Salpêtrière Hospital, Assistance Publique – Hôpitaux de Paris, Paris, France & Centre for Statistics in Medicine, University of Oxford and Chairman & Assistance Publique – Hôpitaux de Paris, and Department of Biostatistics and Medical Informatics, Necker Hospital, France.

Researcher/Project Coordinator Yannick Le Manach - yannick.le.manach.md@gmail.com

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Ultrasound assessment of lung aeration loss during a successful weaning trial predicts postextubation distress

Postextubation distress after a successful spontaneous breathing trial is associated with increased morbidity and mortality. Predicting postextubation distress is therefore a major issue in critically ill patients. To assess whether lung de-recruitment during spontaneous breathing trial assessed by lung ultrasound is predictive of postextubation distress.

Collaborating Countries France, Belgium

Collaborating Institutions Pierre Viars, La Pitié-Salpêtrière Hospital, Assistance Publique-Hôpitaux de Paris, UPMC Univ, Paris, France & Estaing hospital, CHU Clermont-Ferrand, Université d'Auvergne Clermont-Ferrand & Faculté de Médecine, Université d'Auvergne, Clermont-Ferrand, France & Laboratory of Biochemistry & Mont-Godinne University Hospital & Université Catholique de Louvain, Yvoir, Belgium

Researcher/Project Coordinator Yannick Le Manach - yannick.le.manach.md@gmail.com

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Precision of noninvasive hemoglobin-level measurement by pulse co-oximetry in patients admitted to intensive care units for severe gastrointestinal bleeds

Measurement of total hemoglobin, based on pulse co-oximetry, is a continuous and noninvasive method that has been principally evaluated in healthy volunteers subjected to hemodilution. We tested the hypothesis that its accuracy could adversely affect patients presenting with severe hemorrhage, which is traditionally associated with increased microvascular tone.

Collaborating Countries France, United Kingdom

Collaborating Institutions CHU de Bordeaux Service d'Anesthésie-Réanimation II, Bordeaux, France & Université de Bordeaux Pessac, France & Center for Statistics in Medicine Wolfson College Annexe, University of Oxford, United Kingdom.

Researcher/Project Coordinator Yannick Le Manach - yannick.le.manach.md@gmail.com

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Computed Tomography-Estimated Specific Gravity at Hospital Admission Predicts Six-Month Outcome in Mild-to-Moderate Traumatic Brain Injury Patients Admitted to the Intensive Care Unit

It is clear that patients with a severe traumatic brain injury (TBI) develop secondary, potentially lethal neurological deterioration. However, it is difficult to predict which patients with mild-to-moderate TBI (MM-TBI), even after intensive care unit (ICU) admission, will experience poor outcome at 6 months. Standard computed tomography (CT) imaging scans provide information that can be used to estimate specific gravity (eSG). We have previously demonstrated that higher eSG measurements in the standard CT reading were associated with poor outcomes after severe TBI. The aim of this study was to determine whether eSG of the intracranial content predicts 6-month outcome in MM-TBI.

Collaborating Countries France, USA

Collaborating Institutions Assistance Publique des Hôpitaux de Paris & University of California at San Francisco

Researcher/Project Coordinator Yannick Le Manach - yannick.le.manach.md@gmail.com

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Direct laryngoscopy should be procedure of choice in the airway management of patients with dental cellulitis

Airway management of patients with dental cellulitis can be difficult due to laryngeal deviation and oedema. Awake fibre-optic intubation has been recommended.

Collaborating Countries France

Collaborating Institutions CHU Pitié-Salpêtrière, Paris, France

Researcher/Project Coordinator Yannick Le Manach - yannick.le.manach.md@gmail.com

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Comparing treatment effects between propensity scores and randomized controlled trials: improving conduct and reporting.

Fundamental to the validity and reproducibility of estimating treatment effects in observational studies incorporating propensity scores is clear and transparent reporting. Reporting guidelines exist for a variety of study designs and statistical analyses,¹⁶ yet currently there are no consensus-based guidelines on either the conduct or reporting of propensity scores. As an absolute minimum we recommend that authors adhere to STROBE guidelines for reporting observational studies,¹⁷ but, in addition, authors should be encouraged to provide sufficient and clear information on: how the propensity score was developed, the handling of missing data, how the propensity score-matched sample created, how balance between treatment groups was assessed, and the statistical methods used to estimate the treatment effect.

Collaborating Countries France, United Kingdom

Collaborating Institutions Centre for Statistics in Medicine, Wolfson College Annexe, University of Oxford & Centre Hospitalo-Universitaire Pitié-Salpêtrière, Paris

Researcher/Project Coordinator Yannick Le Manach - yannick.le.manach.md@gmail.com

Faculty of Health Sciences

PROJECT CATEGORY: RESEARCH

ANESTHESIA

Noninvasive hemodynamic monitoring: no high heels on the farm; no clogs to the opera

To begin, one must ask why the anesthesiology community even needs noninvasive hemodynamic monitors. The most intuitive answer is that anesthesiologists need noninvasive monitors to “replace invasive ones and get rid of the complications related to vessel cannulation.”² This is probably why mini invasive cardiac output monitors are so popular these days; they may replace highly invasive monitors such as the Swan Ganz catheter. Consequently, one may envision that, in the future, noninvasive monitors will completely replace invasive approaches. Following this logic, some may even think that hemodynamic information derived from the plethysmographic waveform may replace the Swan Ganz. However, noninvasive technologies are not there yet, and when used in high-risk settings, these noninvasive technologies may prove to be unreliable in the early stages of their development as is the case with mini- and noninvasive cardiac output monitors.³ However, a more relevant answer to the opening question is that we need noninvasive monitors in order to obtain critical information in patients for whom the risks associated with an invasive monitor outweigh its expected benefits.

Collaborating Countries France

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| Collaborating Institutions | Groupe Hospitalier Pitié Salpêtrière, Assistance Publique Hôpitaux de Paris, Paris, France |
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| Researcher/Project Coordinator | Yannick Le Manach - yannick.le.manach.md@gmail.com |
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DEPARTMENT OF BIOCHEMISTRY AND BIOMEDICAL SCIENCES

PROJECT CATEGORY: RESEARCH

BIOCHEMISTRY AND BIOMEDICAL SCIENCES

Novel Antibacterial Targets, Assays, Probes and Opportunities in Bacterial Cell Wall Biogenesis.

Millions of people die each year from bacterial infections and tens of millions suffer from the consequences of these infections. The discovery of the antibiotic penicillin once opened the door to treat these infections by stopping bacteria making the polymer in the cell wall that holds them together. This polymer, called peptidoglycan, is made up of an interlocking network of sugars and strings of amino acids (peptides). Specialized proteins (called PBP), with the ability to stitch together these sugars and peptides are the targets inhibited by penicillin, stopping cell wall synthesis and killing the bacterium. Many important bacteria are no longer killed by penicillin and other antibiotics that attack other stages in the production of peptidoglycan. Bacteria have changed, evading the action of these antibiotics. We need to fight back. Our progress until recently has been hampered by our inability to routinely synthesize the key chemical components that make this polymer. We can now do this. This is exciting, as we develop the capability to explore important unanswered questions about how bacteria grow and control the

production of peptidoglycan. As leading researchers in peptidoglycan metabolism in Canada and the UK with complementary facilities and expertise, Team CanUK proposes to consolidate established collaborations and further the development of a research network to increase our understanding of the fundamental biology of this process. All of this will open fundamentally new biological insights, and opportunities to use these for the future development of new antibiotics that will work against multiply antibiotic resistant bacteria like MRSA and TB

Collaborating Countries England, UK

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| Collaborating Institutions | University of Warwick |
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| Researcher/Project Coordinator | Eric Brown - ebrown@mcmaster.ca Lori Burrows - burrowl@mcmaster.ca |
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PROJECT CATEGORY: RESEARCH

BIOCHEMISTRY AND BIOMEDICAL SCIENCES

NOD2 Peptidoglycan Sensing Controls Immunometabolism and Pre-diabetes

Understand how bacteria and nutrition contribute to obesity and diabetes.

Collaborating Countries France

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| Collaborating Institutions | INSERM- Institut National de la Santé et de la Recherche Médicale (National Institute of Health and Medical Research) |
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| Researcher/Project Coordinator | Jonathan Schertzer - schertze@mcmaster.ca |
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DEPARTMENT OF CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

PROJECT CATEGORY: RESEARCH
CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Vascular events In noncardiac Surgery patients cohort evaluation (The VISION Study)

The VISION Study is an international, multi-centre, prospective cohort of patients aged 45 or older undergoing noncardiac surgery receiving a regional or general anesthetic and requiring an overnight stay in hospital.

Collaborating Countries Canada, USA, Colombia, Brazil, Peru, United Kingdom, Poland, France, Spain, Hong Kong, Malaysia, India, South Africa, Australia

Collaborating Institutions McMaster University Medical Centre, Juravinski Hospital, Hamilton General Hospital, St. Joseph's Hospital, Walter C. Mackenzie Health Sciences Centre, Winnipeg Health Sciences Centre - Canada, Prince of Wales Hospital, Victoria Hospital – Hong Kong, Victoria Hospital – London, ON, Hospital Universitario de Santander, Foundation Cardio Infantil – Colombia, Hospital do Coracao, Hospital de Clinicas de Porto Alegre – Brazil, Hospital Nacional Cayetano Heredia – Peru, Hospital de Sant Pau, Hospital Gregorio Maranon – Spain, Barts and The Royal, University College Hospital, Leeds Teaching Hospitals, Royal Liverpool University Hospital – United Kingdom, Piti-Salpetriere Hospital – France, St. John's Medical College, Christian Medical College – India, University Malaya Medical Centre – Malaysia, Inkosi Albert Luthuli Hospital – South Africa, Westmead Hospital – Sydney, Jagiellonian University Medical College – Poland, Washington University School of Medicine, Cleveland Clinic – United States of America

Researcher/Project Coordinator P.J. Devereaux (PI)-
philipj@mcmaster.ca
Shirley Pettit, (Study Coordinator)

PROJECT CATEGORY: RESEARCH/EDUCATION/
GLOBAL PARTNERSHIP
CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

N.I.H. International Centers of Excellence on Malaria Research(ICEMR) Grant (Malaria Transmission and the Impact of Control Effects in Southern Africa) Subcomponent: A Focused Ethnographic Study of People's Responses to Malaria and Malaria-like Illnesses (Fever, Convulsions and Anemia) in Zambia and Zimbabwe

The long-term goal of this 7-year, multi-million dollar project (one of 10 awarded in 2010 from the U.S. NIH) is to provide the evidence-base for the development of sustainable control strategies to further reduce malaria transmission in areas where malaria is endemic. The Johns Hopkins ICEMR Project is based on southern Africa (two sites in Zambia and one in Zimbabwe) that represent epidemiologically diverse settings regarding malaria transmission, morbidity and mortality rates. The aim of this project is also to assess the feasibility of malaria elimination through an integrated understanding of local malaria epidemiology, vector biology, parasite population structure and community- and household-level beliefs and behaviors.

Information providing a detailed understanding of spatio-temporal patterns of malaria in three different epidemiological settings (Aims 1-3) will inform the development of locally adapted, cost-effective, and community-supported strategies for malaria control (Aim 4). These epidemiological investigations (Research Area A) will be closely linked with studies of spatio-temporal changes in the anopheline vector (Research Area B) and plasmodium population structure (Research Area C) in response to ecological changes and malaria control efforts. This integrated, evidence-based approach to malaria control will form the foundation for a regional Center of Excellence for Malaria Research in southern Africa.

Dr. Lohfeld of McMaster University is the lead researcher on the focused ethnographic study (FES) portion of project. This is a substudy within the epidemiology research area led by Dr. William Moss of Johns Hopkins University. During the ICEMR-FES a multidisciplinary research team will assess health-related beliefs and practices in the study communities related to: a) local perceptions of malaria causation, symptomatology, pathophysiology, disease progression, treatment and prevention (the explanatory model of malaria and malaria-like illnesses); b) enablers and barriers to seeking timely appropriate treatment; and c) the use effective preventive strategies, including the potential acceptability of novel malaria control strategies such as transmission blocking vaccines and transgenic mosquitoes.

The overall aim of the Hopkins ICEMR-FES is to identify the pattern of health-related beliefs, behaviors and contextual variables in each of the study sites. These will then be correlated with the level of malaria control in each epidemiological setting. The objective is to achieve high levels of community participation and support for both current and novel malaria control strategies that are critical to achieving better rates of malaria control and also lead to malaria elimination.

Faculty of Health Sciences

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| Collaborating Countries | USA, Zambia |
| Collaborating Institutions | Johns Hopkins University, U.S. National Institutes of Health |
| Researcher/Project Coordinator | Lynne Lohfeld - lohfeld@mcmaster.ca |

PROJECT CATEGORY: EDUCATION/ RESEARCH
CLINICAL EPIDEMIOLOGY AND BIostatISTICS

ADAPT 2 (African Development of AIDS Prevention Trial Capacity) Programme: Training MPs in Sub-Saharan Africa about using evidence in HIV policy

Increase the capacities of African researchers in 12 southern African countries to contribute to large high quality RCTs on AIDS prevention; Increase the institutional capacity in an African NGO and at least two African universities to train people to conduct AIDS prevention RCTs; Build on the multi-country RCT logistical framework of ADAPT1, that allows for both cluster allocation and intervention cohorts, including the ethical and logistical infrastructure. Increase the capacities of African policy makers and planners to interpret and to use the findings of research, in particular the findings from RCTs. Develop further fundable RCT proposals and partnerships that can move AIDS prevention RCTs forward beyond the life of this project

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| Collaborating Countries | Canada, Lesotho, South Africa, Botswana, Zimbabwe, Swaziland, Namibia, Tanzania, Malawi, Mozambique, and Zambia |
| Collaborating Institutions | CIET Canada, McMaster University |
| Researcher/Project Coordinator | Lehana Thabane - thabanl@mcmaster.ca |

PROJECT CATEGORY: EDUCATION/ RESEARCH
CLINICAL EPIDEMIOLOGY AND BIostatISTICS

Capacity Building in Clinical Trials

Issues in Design and Analysis of Knowledge Translation Trials. Monitoring randomized controlled trials: Optimal strategies for use by Data Safety Monitoring Boards. The Importance of Conducting Pragmatic trials in Health: Benefits, Criticisms and Controversies. Uses and misuses of meta-analysis. Size matters: common miss-steps about justifying sample sizes in clinical studies. Common misuse, abuse and non-use of statistical and epidemiological terms in manuscripts. Populations and sampling.

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| Collaborating Countries | Canada, South Africa |
| Collaborating Institutions | School of Medicine/Groote Hospital, University of Cape Town. Faculty of Medicine and Health Sciences, Stellenbosch University. CE&B, McMaster University |
| Researcher/Project Coordinator | Lehana Thabane - thabanl@mcmaster.ca |

PROJECT CATEGORY: EDUCATION/ RESEARCH
CLINICAL EPIDEMIOLOGY AND BIostatISTICS

Conducting Clinical Trials in Sub-Saharan Africa

Conducting Clinical Trials in Sub-Saharan Africa. Phases of Clinical Trials. Research Question Formulation. Uses and misuses of meta-analysis of Trials. Randomization Sequence, Generation, Allocation, Concealment, Blinding, Follow-up and Attrition. Challenges and Limitations with Clinical Trials. Reporting a Clinical Trial Group Work: Using the CONSORT Checklist. Issues KT Trials – Pragmatic vs explanatory Part I. Issues KT Trials – Pragmatic vs explanatory Part II. Tips for enhancing collaboration in clinical trials

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| Collaborating Countries | Canada, Cameroon |
| Collaborating Institutions | University of Yaoundé CE&B, McMaster University |
| Researcher/Project Coordinator | Lehana Thabane - thabanl@mcmaster.ca |

PROJECT CATEGORY: EDUCATION/ RESEARCH
CLINICAL EPIDEMIOLOGY AND BIostatISTICS

Capacity-building in Randomized Controlled Clinical Trials

1. Subgroup and Post-hoc Analyses: Benefits and Challenges 2. What you need to know about pilot studies: the what, why, and how 3. Adjusting for Channeling Bias in Observational Studies: A Comparison of Propensity Score-Based Methods 4. Overview of Bayesian Analysis: An example of hormone replacement therapy 5. Framing Researchable Question 6. Systematic Reviews and Meta-analysis of Observational Studies: Opportunities and Challenges of Post-marketing Research Synthesis. HIRA, Seoul, Korea.

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| Collaborating Countries | Canada, South Korea |
| Collaborating Institutions | CE&B, McMaster University, Clinical Research Center for Stroke, Seoul University Hospital, South Korea |
| Researcher/Project Coordinator | Lehana Thabane - thabanl@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Social Innovation on active and healthy aging for sustainable economic growth - SforAGE

The specific objectives addressed in the project are:

1. To develop the supporting tools and mechanisms for the creation of a Social Innovation Incubator on Active and Healthy ageing
2. To engage and empower society and civil society organisations in research on active and healthy ageing.
3. To introduce evidence-based policymaking, through mutual learning activities and exchanges of good practice to contribute shaping the path of ageing research programmes and funding schemes set out by the FUTURAGE project.
4. To raise awareness among the scientific community on the importance of social responsibility and ethics in ageing research, and offer practical guidance on how to address them.
5. To analyse and improve the existing mechanisms for accessing the market of innovative products and solutions for older people
6. To actively involve the wide range of stakeholders of the value chain and spread knowledge generated along the project duration

Collaborating Countries Denmark, France, Germany, Greece, Italy, Netherlands, Norway, Spain, Sweden, UK, Latvia, Turkey, Portugal, Brazil, Lithuania, India

Collaborating Institutions

- 1 FUNDACIÓN INSTITUTO GERONTOLÓGICO MATIA (INGEMA) Research center SPAIN
- 2 Interdisciplinary Group of Reflection and Mathematical Solutions for Entities (GISME) Think tank on Scientific research SPAIN
- 3 UNIVERSITY OF SHEFFIELD (UFSD) Higher education UK
- 4 GERMAN RESEARCH CENTER FOR ARTIFICIAL INTELLIGENCE (DFKI) Research center GERMANY
- 5 Comune di Torino (CT) Regional Public Administration ITALY
- 6 ADVANCED SOCIAL AND POLITICAL RESEARCH INSTITUTE (ASPRI) Higher education LATVIA
- 7 UNIVERSITAT DE LLEIDA (representing ENAS NETWORK) (UDL) Researcher network EUROPE
- 8 INVESTORNET (INVESTORNET) Company DENMARK
- 9 HEALTH CARE ACADEMICIANS SOCIETY (HCAS) Scientists network TURKEY
- 10 UNIVERSITÉ DE PAU ET PAYS DE L'ADOUR (UPPA) Higher education FRANCE
- 11 INSTITUTO UNIVERSITARIO DE LISBOA (ISCTE) Research centre PORTUGAL
- 12 Departamento de Saúde Coletiva (DSC) Public institute BRAZIL
- 13 Municipality of Krakow (GMK) Public authority POLAND

Collaborating Institutions

- 14 Champagne-Ardenne Research and Innovation Agency (CARINNA) Regional innovation agency FRANCE
- 15 Seniors Initiatives Centre (SIC) Civil society Organisation LITHUANIA
- 16 Santa Casa da Mesericórdia (SCMI-SERICORDIA) Civil Society Organisation PORTUGAL
- 17 Active Citizenship Foundation (FONDACA) Civil Society Organisation ITALY
- 18 European Federation of Older Persons (EURAG) Civil society

Researcher/Project Coordinator Parminder Raina - praina@mcmaster.ca

PROJECT CATEGORY: RESEARCH
CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Consortium on Health and Ageing Network of Cohorts in Europe and the United States (CHANCES)

CHANCES aims at combining and integrating on-going studies in order to produce evidence on ageing-related health characteristics and determinants in Europe, and their socio-economic implications.

Collaborating Countries Greece, Sweden, the Netherlands, Germany, Denmark, UK, Finland, France, US, Norway

Collaborating Institutions

Hellenic Health Foundation
National and Kapodistrian University of Athens
Umea Universitet
Rijksinstituut voor volksgezondheid en milieu (National Institute for Public Health and the Environment)
Wageningen Universiteit
Deutsches Krebsforschungszentrum
Kraeftens Bekaempelse (Danish Cancer Society)
Erasmus Universitair Medisch Centrum
Universität Mannheim
Uni Queen's University Belfast
Terveyden ja hyvinvoinnin laitos (National Institute for Health and Welfare)
Centre international de recherche sur le cancer (International Agency for Research on Cancer) IARC
The Brigham and Women's Hospital, Inc.
Brigham and Women's Hospital
University College London
Universitetet i Tromsoe

Researcher/Project Coordinator Parminder Raina - praina@mcmaster.ca

Faculty of Health Sciences

PROJECT CATEGORY: GLOBAL PARTNERSHIP
CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

International Agency for Research on Cancer - IARC

To collaborate on biomarkers for nutrition and metabolism

Collaborating Countries France, Spain

Collaborating Institutions IARC and SIFORAGE

Researcher/Project Coordinator Parminder Raina - praina@mcmaster.ca

PROJECT CATEGORY: RESEARCH
CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Participation rate in Designed Uneven Randomization Trials (DU-RANDOM)

Until now, no convincing data exists on the impact of DUR on participation rate in trials despite the more than anecdotal use, even in high impact trials. The primary objective of this study is to identify the potential impact of DUR on participation rate by conducting a systematic review of reports of RCTs published 2010-2011, in 25 general medical journals with the highest impact factor. The secondary objectives are to describe (1) the epidemiology, (2) the reasons, (3) and the reporting characteristics of DUR trials.

Collaborating Countries China, United States, Germany, Brazil, Switzerland

Collaborating Institutions 2nd Affiliated Hospital of Guangzhou University of Chinese Medicine
Institute of Health Policy, Management and Evaluation, University of Toronto
Epidemiology and Health Technology Assessment Institute. Universidade Federal do Rio Grande do Sul. Porto Alegre, Brazil
Department of Internal Medicine, Division of Nephrology, University of Missouri Kansas City, Kansas City, United States
Basel Institute for Clinical Epidemiology & Biostatistics, University Hospital Basel, Basel, Switzerland

Researcher/Project Coordinator Holger J. Schünemann - schuneh@mcmaster.ca
Darong Wu - darwu@mcmaster.ca

PROJECT CATEGORY: GLOBAL PARTNERSHIP
CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Lancet Palestinian Health Alliance

The Alliance aims to enhance the quality and quantity of health research on Palestinians. It does so through mentoring, workshops, collaborations, conferences, etc, as well as the involvement of The Lancet in supporting and reporting the activities.

Collaborating Countries Occupied Palestinian territories, U.K., Lebanon, Jordan, Egypt, U.S.

Collaborating Institutions The Lancet, Harvard University, University of Glasgow, Bir Zeit University, various other universities in Europe and the Middle East

Researcher/Project Coordinator Harry Shannon - shannonh@mcmaster.ca

PROJECT CATEGORY: RESEARCH
CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Survey Methods in Difficult Settings

We developed a method of sampling in 'difficult settings', such as Low Income Countries, using GPS and satellite imagery. We used the method in two surveys, and wrote a paper on the method for a peer-reviewed journal.

The publication was:

Shannon HS, Hutson R, Kolbe A, Haines T, Stringer B. Choosing a survey sample when data on the population are limited: a method using Global Positioning Systems and satellite photographs. *Emerging Themes in Epidemiology*. 2012; 9:5. With others at McMaster, we have a CIHR grant to compare the performance of the new method with others that have been proposed and/or used in the literature. Using high-powered computing, we are creating many 'virtual' populations and simulating sampling from the populations by the different methods. We will determine which method(s) are best to use in various situations.

Collaborating Countries USA

Collaborating Institutions University of Michigan, Boise State University

Researcher/Project Coordinator Harry Shannon - shannonh@mcmaster.ca
Ted Haines - hainest@mcmaster.ca
Ben Bolker - bbolker@gmail.com
Roman Viveros-Aguilera - rviveros@math.mcmaster.ca
Patrick Emond - emondpd@mcmaster.ca

PROJECT CATEGORY: RESEARCH

CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Perceptions of Security in Southern Lebanon

We surveyed people in Southern Lebanon to determine attitudes, etc., towards small arms and other security issues.

We published a chapter reporting the results:

Hutson RA, Kolbe AR, Haines T, Springer B, Shannon H, & Salamey I. (2009) "Testing Received Wisdom: Perceptions of Security in Southern Lebanon." In: Small Arms Survey 2009: Shadows of War, Cambridge, UK: Cambridge University Press.

Collaborating Countries Lebanon, USA

Collaborating Institutions Lebanese American University, Wayne State University, University of Michigan, Small Arms Survey, British Embassy in Lebanon

Researcher/Project Coordinator Harry Shannon - shannonh@mcmaster.ca
Ted Haines - hainest@mcmaster.ca

PROJECT CATEGORY: RESEARCH

CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Evaluation of the World Food Program's work in Haiti following the 2010 earthquake

We used records of people who had participated in the World Food Program's work projects after the 2010 earthquake. People were compensated by receiving food, food and cash, or cash. We wrote a report for the World Food Program describing the findings.

Collaborating Countries Haiti, USA

Collaborating Institutions World Food Program, Wayne State University, University of Michigan

Researcher/Project Coordinator Harry Shannon - shannonh@mcmaster.ca

PROJECT CATEGORY: RESEARCH

CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Survey of Port-au-Prince after the 2010 Earthquake

Survey of households in Port-au-Prince that had been surveyed shortly before the earthquake. We estimated mortality, morbidity, crime and other relevant outcomes.

The results were used in the UN's gathering to determine what was needed to help rebuild Haiti.

Collaborating Countries Haiti, USA

Collaborating Institutions Wayne State University, University of Michigan

Researcher/Project Coordinator Harry Shannon - shannonh@mcmaster.ca

PROJECT CATEGORY: RESEARCH

CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Survey of Palestinian Refugee Camps in Lebanon

We surveyed three Palestinian refugee camps in Lebanon to understand the extent of exposure to violence and its determinants. We have submitted a paper to a peer-reviewed journal.

Collaborating Countries Lebanon, USA, UK

Collaborating Institutions Wayne State University, Pursue Ltd

Researcher/Project Coordinator Harry Shannon - shannonh@mcmaster.ca

PROJECT CATEGORY: RESEARCH

CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Palestinian Adolescents' Mental Health in Protracted Political Violence

We have used a survey of 4 villages in the West Bank to identify the determinants of adolescents' mental health.

A paper is being prepared for publication in a peer-reviewed journal.

Collaborating Countries Occupied Palestinian territories, Netherlands

Collaborating Institutions Bir Zeit University, University Medical Center, Amsterdam

Researcher/Project Coordinator Harry Shannon - shannonh@mcmaster.ca

PROJECT CATEGORY: RESEARCH

CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Parents' Discipline of Children in Palestinian Families

Using data from the Pan Arab Project for Family Health survey, we have extracted information on how Palestinian parents discipline children. We have created scales of different styles of discipline, and determinants of the styles.

We have drafted a report for publication in a peer-reviewed journal.

Collaborating Countries Occupied Palestinian territories, UK

Collaborating Institutions Bir Zeit University

Researcher/Project Coordinator Harry Shannon - shannonh@mcmaster.ca

Faculty of Health Sciences

PROJECT CATEGORY: RESEARCH
CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Human Security and Associated Factors in the Gaza Strip 6months After the Winter 2008-09 Israeli Attack

We analyzed data from a survey of households in Gaza 6 months after the Israeli attack in 2008-9. We explored health-related status of residents.

Results were published in:

Ziadni M, Hammoudeh W, Rmeileh Na, Hogan D, Shannon H, Giacaman R. Human security and associated factors in the Gaza Strip 6 months after the winter 2008-09 Israeli attack.

Journal of Human Security. 2011; 7:23-36

Collaborating Countries Occupied Palestinian territories, U.S

Collaborating Institutions Bir Zeit University, Brown University

Researcher/Project Coordinator Harry Shannon - shannonh@mcmaster.ca

PROJECT CATEGORY: RESEARCH
CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Health related quality of life of Gaza Palestinians in the aftermath of the winter 08-09 Israeli attack on the Gaza Strip.

We analyzed a survey of household in Gaza shortly after the Israeli attack in 2008-9. We were interested especially in health-related quality of life of the residents.

Results were published in:

Abu-Rmeileh NME, Hammoudeh W, Mataria A, Husseini A, Khawaja M, Shannon H, Hogan D, Watt GCM, Zurayk H, Giacaman R. Health related quality of life of Gaza Palestinians in the aftermath of the winter 08-09 Israeli attack on the Gaza Strip. European Journal of Public Health 2012; 22:732-737.

Collaborating Countries Occupied Palestinian territories, U.S, U.K., Lebanon

Collaborating Institutions Bir Zeit University, Brown University, University of Glasgow, American University of Beirut

Researcher/Project Coordinator Harry Shannon - shannonh@mcmaster.ca

PROJECT CATEGORY: RESEARCH
CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Coronary CT Angiography to predict Vascular Events in noncardiac Surgery patients cohort evaluation study (CTA VISION)

CTA VISION is an international, multi-centre, prospective cohort attempting to determine: 1) if preoperative CTA has additional predictive value, beyond clinical variables, for the occurrence of major perioperative cardiac events at 30 days post surgery and 2) the underlying coronary anatomy associated with perioperative myocardial infarctions.

Collaborating Countries Canada, Hong Kong, Malaysia, India, South Africa, Poland, Australia, USA

Collaborating Institutions Hamilton Health Sciences, St. Joseph's Hospital, Walter C. Mackenzie Health Sciences Centre, Ottawa Heart Institute, London University Hospital – Canada, Prince of Wales Hospital – Hong Kong, University Malaya Medical Centre – Malaysia, All India Institute of Medical Sciences – India, Inkosi Albert Luthuli Hospital – South Africa, Jagiellonian University Medical College – Poland, Westmead Hospital – Australia, Washington University School of Medicine - USA

Researcher/Project Coordinator Tej Sheth (PI) - shetht@mcmaster.ca
Shirley Pettit (Coordinator)

DEPARTMENT OF FAMILY MEDICINE

PROJECT CATEGORY: GLOBAL PARTNERSHIP/EDUCATION
FAMILY MEDICINE

Project SORT (Safer Obstetric Rural Tanzania)

Survey of households in Port-au-Prince that had been surveyed shortly before the earthquake. We estimated mortality, morbidity, crime and other relevant outcomes.

The results were used in the UN's gathering to determine what was needed to help rebuild Haiti.

Collaborating Countries Tanzania, Canada

Collaborating Institutions Society of Obstetricians & Gynecologists of Canada, Canadian Network for International Surgery, Canadian International Development Agency

Researcher/Project Coordinator Keyna Bracken- bracken@mcmaster.ca

PROJECT CATEGORY: GLOBAL PARTNERSHIP
FAMILY MEDICINE

International Relief Effort- St. Joseph's Foundation post Haiti Earthquake

Provide relief and organizational rebuild to Hôpital de la Paix in Port au Prince, Haiti, damaged by the earthquake.

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| Collaborating Countries | Haiti, Canada |
| Collaborating Institutions | St. Joseph's Outreach/ Foundation; SJHH; St. Mary's |
| Researcher/Project Coordinator | Keyna Bracken- bracken@mcmaster.ca Alezandre Dauphin- dauphina@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
FAMILY MEDICINE

Guatemala National Mental Health Survey Research

Analysis of National Mental Health Survey 2009- Looking primarily at Suicide and Substance Use.

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| Collaborating Countries | Guatemala |
| Collaborating Institutions | University of San Carlos |
| Researcher/Project Coordinator | Neil Arya - narya@uwaterloo.ca |

PROJECT CATEGORY: RESEARCH
FAMILY MEDICINE

The Health Status of the Pokot Districts, Kenya: A Baseline Survey Report submitted to Canadian Red Cross April 2013

Baseline survey of maternal child health status, environmental and socioeconomic factors, health service utilization in Kenya.

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| Collaborating Countries | Kenya |
| Collaborating Institutions | Canadian Red Cross, Kenyan Red Cross |
| Researcher/Project Coordinator | Neil Arya - narya@uwaterloo.ca |

PROJECT CATEGORY: RESEARCH
FAMILY MEDICINE

Maternal, Newborn & Child Health in the Counties of Bomi, Gbarpolu and Grand Gedah, Liberia: A Baseline Survey Report June 2013

Baseline survey of maternal child health status, environmental and socioeconomic factors, health service utilization in Liberia.

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| Collaborating Countries | Liberia |
| Collaborating Institutions | Canadian Red Cross-Liberia Red Cross |
| Researcher/Project Coordinator | Neil Arya - narya@uwaterloo.ca |

GLOBAL HEALTH OFFICE

PROJECT CATEGORY: EDUCATION
GLOBAL HEALTH

International Interdisciplinary Summer Institute

The Global Health Office hosts the International Interdisciplinary Summer Institute annually for participants across the globe. Participants that attend engage in personalized consultations with recognized experts from McMaster in curriculum development, student evaluation, e-learning and faculty development across the health sciences. The Institute began in 2005 with a week-long program offered every year since its inception. Over the past 6 years (2005-2011) we have welcomed 24 universities from 16 countries worldwide, to a total of 115 participants. Participants attend the Institute to learn about health science education, including problem based learning. The Institute provides international delegates the opportunity to exchange ideas, learn about educational methodologies used at McMaster and share their own experiences in research and education. It has also been an invaluable support to build on partnerships and foster existing collaborations.

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| Collaborating Countries | Botswana, Brazil, Denmark, Hong Kong, Kenya, Japan, Portugal, Spain, South Africa, South Korea, Taiwan |
| Collaborating Institutions | University of Botswana, Evangelical University, Brazil, University College Lillebaelt, Hong Kong Polytechnic University, Aga Khan University, Japanese Red Cross – Hiroshima College of Nursing, Niigata University Hospital, Red Cross College of Nursing, University of the Algarve, Catalonia Open University, Multi-Campus, University of Fort Hare, North West University, Yonsei University, Daejeon University, Tri-service General Hospital, |
| Researcher/Project Coordinator | Andrea Baumann - baumanna@mcmaster.ca Mabel Hunsberger - hunsber@mcmaster.ca Alan Neville - neville@mcmaster.ca |

Faculty of Health Sciences

PROJECT CATEGORY: EDUCATION/RESEARCH

GLOBAL HEALTH

“Experts on Tap” - Massive Open On-Line Courses (MOOC)

Six McMaster University experts will share their knowledge and research on global health issues as the university prepares to offer its first world-class lectures free online. Experts on Tap, a six-week series that will go live fall, 2013 is part of a global phenomenon in education called MOOCs (Massive Open On-line Courses) through which universities are offering not-for-credit courses free to anyone with an Internet connection. During the Experts on Tap series, McMaster experts in health sciences, business and social sciences will discuss such issues as vulnerable populations, mobile technology, the auto industry and employment and Aboriginal issues as they relate to global health.

The first MOOCs was piloted in March, 2013 to the Master of Science in Global Health students.

Collaborating Countries India, Netherlands,Thailand

Collaborating Institutions Maastricht University, Netherlands
Manipal University, India
Thammasat University, Thailand

Researcher/Project Coordinator Andrea Baumann-
baumanna@mcmaster.ca
Mathew Mercuri -
matmercuri@gmail.com

DEPARTMENT OF MEDICINE

PROJECT CATEGORY: RESEARCH

MEDICINE

Basic and Clinical Studies on Colonic Motility

In January 2012, I set up a basic science gastrointestinal motility laboratory together with Jihong Chen which focused on High Resolution Spatio Temporal mapping of the movements of the colon. The objective was and is to do basic mechanistic research in the rat and rabbit colon and clinical research using High Resolution Manometry. I am co-supervising graduate and undergraduate students and have been appointed Honorary Professor at Wuhan University. We have made great advances in our understanding of neurogenic and myogenic motor patterns, the role of serotonergic nerves and other physiological interests. At this moment (January – July 2013) I am again in China on sabbatical and we are doing High Resolution manometry to evaluate the use of the gastrocolonic reflex as a tool to understand neuropathy in chronic constipation and healthy volunteers. The High Resolution manometry is giving a details of human colonic motility never reported before and we are currently evaluating the possibilities for advanced diagnosis and treatment based on the obtained data.

The first collaborative papers have been published or are in press [1-3]. [4]

Collaborating Countries China

Collaborating Institutions Collaboration with Renmin Hospital of Wuhan University
Jihong Chen, MD PhD, Director clinical Motility lab, Professor of Medicine, Wuhan University

Researcher/Project Coordinator Jan D Huizinga - huizinga@mcmaster.ca

PROJECT CATEGORY: RESEARCH

MEDICINE

PURE (Prospective Urban and Rural Epidemiology Study)

The Prospective Urban-Rural Epidemiologic (PURE) study is the largest global study examining the environmental, societal and biological determinants of obesity and other chronic health problems both in developing societies.

Collaborating Countries Argentina, Australia, Bangladesh, Brazil, Chile, Colombia, Germany, India, Ireland, Malaysia, Pakistan, Peru, Philippines, Poland, UAE, UK, USA, South Africa, Sweden, Turkey, Zimbabwe,

Researcher/Project Coordinator Salim Yusuf - yusufs@mcmaster.ca

PROJECT CATEGORY: RESEARCH

MEDICINE

HOPE-4

The overall objective of HOPE-4 is to develop, implement and evaluate an evidence-based, program for cardiovascular disease (CVD) risk assessment, treatment and control involving: (1) simplified algorithms implemented by non-physician health workers (NPHW); (2) single pill, fixed dose, combination therapy (Poly-Cap) and (3) Treatment supporters and mobile phone technology to optimize long-term medication and lifestyle adherence.

Collaborating Countries Malaysia, Colombia

Researcher/Project Coordinator Salim Yusuf - yusufs@mcmaster.ca

DEPARTMENT OF MEDICINE

PROJECT CATEGORY: RESEARCH

MEDICINE

HOPE-3

A large, simple trial utilizing a 2x2 factorial design of lipid modification with rosuvastatin 10mg/day vs. placebo, blood pressure lowering with candesartan/HCT 16/12.5mg/day vs placebo and combined treatment with rosuvastatin and candesartan/HCT vs placebo on major vascular events.

Collaborating Countries Argentina, Australia, Brazil, Canada, China, Colombia, Czech Rep, Ecuador, Hungary, India, Israel, Korea, Malaysia, Netherlands, Philippines, South Africa, Russia, Slovakia, Sweden, UK, Ukraine

Researcher/Project Coordinator Salim Yusuf - yusufs@mcmaster.ca
Eva Lonn - eva.lonn@phri.ca

PROJECT CATEGORY: RESEARCH

MEDICINE

BENEFIT. Stop Chagas

BENEFIT - A randomized double-blind placebo-controlled trial of benznidazole to evaluate morbidity and mortality in patients with chronic Chagas disease.

Stop CHAGAS - Randomized double blind to evaluate the efficacy and safety of posaconazole and posaconazole in combination with benznidazole given orally for 60 days to reduce parasitemia as at the end of 120 days of follow-up post treatment in subjects with asymptomatic chronic Chagas disease.

Collaborating Countries Argentina, Bolivia, Brazil, Chile, Columbia, El Salvador, Guatemala, Mexico, Peru, Venezuela

Researcher/Project Coordinator Salim Yusuf - yusufs@mcmaster.ca
Carlos Morillo - morillo@hpsc.ca

PROJECT CATEGORY: RESEARCH

MEDICINE

REMEDY. IMPI

REMEDY –a prospective registry in 2 phases: the vanguard phase involving centers participants with RHD. Over a 2-year follow-up, disease progression and treatment practices with particular reference to adherence to secondary prophylaxis and oral anticoagulation regimens will be studied.

IMPI – Is a clinical trial where patients who are on anti-tuberculosis treatment for pericardial tuberculosis are randomly allocated to receive either prednisolone or a matching placebo tablet, or Mycobacterium w injection or placebo injection.

Collaborating Countries India, Kenya, Mozambique, Malawi, Nigeria, Sierra Leone, South Africa, Zimbabwe, Uganda

Researcher/Project Coordinator Salim Yusuf - yusufs@mcmaster.ca

PROJECT CATEGORY: RESEARCH

MEDICINE

ORIGIN – Completed 2012

A Multicenter, International Randomized, 2x2 Factorial Design Study to Evaluate the Effects of Lantus (Insulin Glargine) Versus Standard Care, and of Omega-3 Fatty Acids Versus Placebo, in Reducing Cardiovascular Morbidity and Mortality in High Risk People.

Collaborating Countries Argentina, Australia, Austria, Belarus, Bermuda, Brazil, Canada, Chile, China, Colombia, Denmark, Estonia, Finland, France, Germany, Hungary, India, Ireland, Israel, Italy, Korea, Latvia, Lithuania, Mexico, Netherlands, Norway, Philippines, Poland, Romania, Russia, Slovakia, South Africa, Sweden, Switzerland, Turkey, UK, USA, Venezuela

Researcher/Project Coordinator Hertzell Gerstein - gerstein@mcmaster.ca

PROJECT CATEGORY: RESEARCH

MEDICINE

ACCORD – Completed 2012

ACCORDION - Ongoing

ACCORDION (the ACCORD Follow-up Study) is a prospective, observational follow-up study of approximately 8000 participants. It is designed to further elucidate and clarify the long-term effects of the ACCORD treatment strategy. The primary ACCORDION outcome will be the first occurrence of a major cardiovascular event.

Collaborating Countries Argentina, Australia, Austria, Belarus, Bermuda, Brazil, Canada, Chile, China, Colombia, Denmark, Estonia, Finland, France, Germany, Hungary, India, Ireland, Israel, Italy, Korea, Latvia, Lithuania, Mexico, Netherlands, Norway, Philippines, Poland, Romania, Russia, Slovakia, South Africa, Sweden, Switzerland, Turkey, UK, USA, Venezuela

Collaboration Institutions USA – NIH

Researcher/Project Coordinator Hertzell Gerstein - gerstein@mcmaster.ca

Faculty of Health Sciences

PROJECT CATEGORY: RESEARCH
MEDICINE

Re-LY. RE-LYABLE

To compare the efficacy and safety of two blinded doses of dabigatran etexilate with open label warfarin for the prevention of stroke and systemic embolism in patients with non-valvular atrial fibrillation: prospective, multi-centre, parallel-group, non-inferiority trial.

Collaborating Countries Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, China, Colombia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hong Kong, Hungary, India, Israel, Italy, Japan, Korea, Mexico, Malaysia, Netherlands, Norway, Peru, Philippines, Poland, Portugal, Romania, Russia, Singapore, Slovakia, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, Ukraine, United Kingdom, United States

Researcher/Project Coordinator Stuart Connolly - connostu@phri.ca
John Eikelboom - eikelbj@mcmaster.ca
Jeff Healey - Jeff.Healey@phri.ca

PROJECT CATEGORY: RESEARCH
MEDICINE

AVERROES

AVERROES is to evaluate whether Apixaban is more effective than acetylsalicylic acid (ASA) in preventing strokes and systemic embolisms associated with subjects who have atrial fibrillation. The safety of this treatment.

Collaborating Countries Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Chile, Colombia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hong Kong, India, Indonesia, Israel, Italy, Mexico, Malaysia, Norway, Philippines, Poland, Russia, Singapore, South Africa, South Korea, Spain, Sweden, Taiwan, Turkey, Ukraine, United Kingdom, United States

Researcher/Project Coordinator Stuart Connolly - connostu@phri.ca
John Eikelboom - eikelbj@mcmaster.ca
Jeff Healey - Jeff.Healey@phri.ca

PROJECT CATEGORY: RESEARCH
MEDICINE

COMPASS

Randomized controlled trial of rivaroxaban for the prevention of major cardiovascular events in patients with CAD or PAD. If participant not currently on PPI, randomization to pantoprazole/ placebo for the reduction of gastrointestinal bleeding, ulceration, and gastrointestinal obstruction or perforation in subjects with CAD or PAD receiving antithrombotic medications.

Collaborating Countries Argentina, Brazil, Canada, Chile, China, Colombia, Czech Republic, Ecuador, Finland, France, Germany, Hungary, Ireland, Israel, Malaysia, Netherlands, Philippines, Poland, Russia, South Africa, South Korea, Sweden, Switzerland, Ukraine, United Kingdom, USA

Researcher/Project Coordinator John Eikelboom - eikelbj@mcmaster.ca
Jeff Healey - Jeff.Healey@phri.ca

PROJECT CATEGORY: RESEARCH
MEDICINE

INTER-CHF

To understand knowledge, perceptions, etiology, diagnostic and management patterns, potential barriers to care, and outcome among heart failure (HF) patients and physicians, in Asia, Africa and South America.

Collaborating Countries Argentina, Brazil, Chile, China, Colombia, Ecuador, India, Malaysia, Nigeria, Philippines, Qatar, Saudi Arabia, South Africa, Sudan, Uganda.

Researcher/Project Coordinator Hisham Dokainish - hisham.dokainish@phri.ca

PROJECT CATEGORY: RESEARCH
MEDICINE

COMPLETE

To determine whether complete revascularization involving PCI using drug eluting stents of all suitable non-infarct related artery lesions is superior to culprit lesion-only revascularization in reducing the composite outcome of CV death or MI in patients with multi-vessel disease who have undergone successful culprit lesion primary PCI for STEMI.

Collaborating Countries Australia, Brazil, Bulgaria, Canada, China, Czech Republic, Finland, France, Germany, Hungary, Israel, Italy, Macedonia, Netherlands, Poland, South Korea, Spain, Sweden, United Kingdom, United States

Researcher/Project Coordinator Shamir Mehta - smehta@mcmaster.ca

PROJECT CATEGORY: RESEARCH

MEDICINE

TIPS-3

A randomized double-blind placebo-controlled trial for the evaluation of a polypill (with and without aspirin) and vitamin D supplementation in a primary prevention setting to reduce cardiovascular disease (CVD) outcomes.

Collaborating Countries Argentina, Brazil, Canada, China, Colombia, India, Malaysia, Philippines, South Africa, Tanzania

Researcher/Project Coordinator Salim Yusuf - yusufs@mcmaster.ca

PROJECT CATEGORY: RESEARCH

MEDICINE

FUTURA (OASIS 8)

Collaborating Countries Argentina, Brazil, Bulgaria, Canada, Czech Republic, France, Germany, Greece, Hungary, India, Italy, Netherlands, Poland, Russia, South Korea, Spain, United Kingdom, United States

Researcher/Project Coordinator Salim Yusuf - yusufs@mcmaster.ca

SCHOOL OF NURSING

PROJECT CATEGORY: EDUCATION

NURSING

The Human Resources for Health (HRH) Project in Bangladesh

Funded by a grant from the Canadian International Development Agency (CIDA), the School of Nursing, in partnership with Co-Water International Inc., Plan International Canada and the Canadian Association of Schools of Nursing, is contributing to the Human Resources for Health (HRH) Project in Bangladesh. Funded from 2012 to 2017, the goal of the project is improved maternal and neonatal health status of poor women, girls and boys in Bangladesh through enhancement of nurse midwifery training and services at the national level and improvement of services provided by nurse midwives and community skilled birth attendants (CSBA). Led and coordinated by Co-Water International Inc., HRH's technical assistance and support will focus primarily at the national level to assist the Directorate of Nursing Services, Bangladesh Nursing Council, and MOHFW Human Resources Development Unit to strengthen nurse-midwifery education and HR systems, and CSBA training and support. The School of Nursing provided a consultant for the inception stage of the project, conducted in 2012. The mission focused on carrying out eight needs assessments, five baseline information gathering initiatives, and several site visits to the Nurse Institutes and adjacent health facilities.

Collaborating Countries Bangladesh

Collaborating Institutions Canadian International Development Agency (CIDA)
Co-Water International Inc.
Plan International Canada
The Canadian Association of Schools of Nursing

Researcher/Project Coordinator Andrea Baumann - baumanna@mcmaster.ca
Catherine Tompkins - Tompkins@mcmaster.ca

Faculty of Health Sciences

PROJECT CATEGORY: GLOBAL PARTNERSHIP
NURSING

PAHO/WHO Collaborating Centre in Primary Care Nursing and Health Human Resources

McMaster University's School of Nursing was re-designated as a Pan-American Health Organization/World Health Organization (PAHO/WHO) Collaborating Centre in Primary Care Nursing and Health Human Resources for a period of five years (2011-2015). Established in 1992, the Centre is a member of a network of 23 other WHO collaborating nursing centres worldwide that are designated by the WHO director-general to form part of an international network that supports WHO's work and its programme priorities. The Centre is currently led by Andrea Baumann, McMaster's associate vice-president, Global Health, and Associate Professor Ruta Valaitis, who is deputy director of the Centre. It is focused on analysis of the nursing workforce in order to inform health human resources and health service policies; strengthening nursing education to contribute to the development of primary health care integrated services; and developing and disseminating knowledge related to nursing health human resources and interprofessional collaboration to address workforce needs.

Collaborating Countries Australia, Bahrain, Brazil, Botswana, Canada, Chile, Colombia, England, Finland, Germany, Hong Kong, India, Jamaica, Japan, Jordan, Mexico, Myanmar, Philippines, Puerto Rico, Scotland, Slovenia, South Africa, South Korea, Thailand, USA

Collaborating Institutions University of Technology, Australia; Nursing Research Institute, Finland; University of Illinois, Chicago; Nursing Health Centre, Slovenia; Yonsei University, South Korea; Catholic University; South Korea; St. Luke's University, Japan, University of Hyogo, Japan, Mahidol University, Thailand; Case Western Reserve University, USA; University of Michigan, USA; University of Illinois, USA; University of Pennsylvania, USA; University of California, USA; University of Alberta, Canada; McMaster University, Canada; The Institute for John Hopkins Nursing, USA; University of Alabama, USA; University of Miami, USA; University of Autonoma de Mexico; ACOFAEN, Colombia; University of Chile, Chile; University of the West Indies, Jamaica; Glasgow Caledonian University, Scotland; Royal College of Midwives, England; German Nursing Association; New York University, USA; Columbia University, USA; University of Alabama, USA; University of Sao Paulo, Puerto Rico; University of Botswana;

Collaborating Institutions University of South Africa; University of Natal; Jordan University of Science and Technology; National Institute of Nursing, India; College of Health Sciences, India; Christian Medical College and Hospital, India; Chiang Mai University; Thailand; University of Nursing, Myanmar; Hong Kong Polytechnic University; University of the Philippines

Researcher/Project Coordinator Andrea Baumann - baumanna@mcmaster.ca
Ruta Valaitis - valaitis@mcmaster.ca

PROJECT CATEGORY: EDUCATION
NURSING

Capacity Building in Haiti

A 2010 grant from the Department of Foreign Affairs and International Trade Canada (DFAIT) allowed the School of Nursing, in partnership with University Hospital School of Nursing in Haiti, the Haitian Nurses' Association (ANILH) and the Hopital Universitaire de La Paix (HUP) in Port-au-Prince, to support joint planning of Canada-Haiti academic projects to build capacity of academic institutions, provide opportunities for Haitians to resume studying and enhance their skill sets. To that end, the School of Nursing hosted a group of senior nursing officials from Haiti in June 2011 to learn more about their challenges following the 2010 earthquake; to explore how McMaster could help meet some of their needs; to provide an overview of nursing in Canada; and to discuss U.S. rebuilding initiatives in Haiti. This included a two-day workshop organized by Associate Professor Anita Fisher to form partnerships to enhance nursing education and practice in Haiti. All of this builds on the relationships formed through the McMaster-Haiti women's health project taken on by the McMaster schools of nursing and medicine, and the midwifery program a few years ago; a visit by two Haitian nursing students to McMaster in January 2011; and Fisher's visit to Haiti in the fall of 2010. The major outcome of the workshop and visit was the planning and execution of an international congress conducted by the Haitian Nurses Association (ANILH) in Port-au-Prince, Haiti in November 2011, which was attended by six McMaster faculty members. This conference defined nursing's role in the future health care system in Haiti and outlined the support they will require from foreign partners, including McMaster University.

Collaborating Countries Haiti

Collaborating Institutions Department of Foreign Affairs and International Trade Canada (DFAIT) University Hospital School of Nursing in Haiti. The Haitian Nurses' Association (ANILH) Hopital Universitaire de La Paix (HUP) in Port-au-Prince, Haiti

Researcher/Project Coordinator Anita Fisher - afisher@mcmaster.ca

PROJECT CATEGORY: EDUCATION

NURSING

**Oncology Nursing Program Partnership,
The University of the West Indies (Trinidad)**

Representatives from the School of Nursing were honoured to attend the graduation ceremony in October 2010 for the second class of students from the oncology nursing courses offered as a joint initiative between the McMaster School of Nursing and the University of West Indies. In total, 37 students completed the six courses offered by McMaster University. The graduation ceremony marked the successful completion of the initiative whose goal was to build capacity to prepare Trinbagonian nurses for leadership roles in cancer care nursing in Trinidad and Tobago where cancer is a significant health problem among its population and specialized cancer care resources are scarce. Associate Professor Carolyn Ingram led the three-year project.

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| Collaborating Countries | Trinidad and Tobago |
| Collaborating Institutions | The University of the West Indies (Trinidad) |
| Researcher/Project Coordinator | Carolyn Ingram (retired) |

PROJECT CATEGORY: EDUCATION

NURSING

Leadership and Management Program Affiliation with Aga Khan University Hospital

In January 2009 the Leadership and Management Program (LMP) developed an affiliation with the Aga Khan University Hospital (AKUH) in Karachi, Pakistan. The focus of this affiliation was to assist the AKUH in its leadership capacity building initiative. Five nurses chosen by the AKUH enrolled in and successfully completed the Leadership and Management in Healthcare Organizations course. Four of these students were located in Karachi, Pakistan and the remaining student was located in Kabul, Afghanistan. Key topic areas within the course included: a) system issues, b) funding models, c) leadership, d) change and motivation, e) planning processes, f) human resources, and g) quality cultures. A joint LMP and AKUH evaluation occurred at the end of the affiliation. Key outcomes achieved included: a) integration of learning communities as extensions of the classroom; b) reciprocal learning through the shared experiences of the faculty member and students; c) integration of theory with real practice issues; and d) dissemination of scholarship into the practice settings. In May 2010, the LMP and AKUH jointly presented on the experience and outcomes at the Third International Education Conference in Sydney, Australia.

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| Collaborating Countries | Pakistan |
| Collaborating Institutions | Aga Khan University Hospital |
| Researcher/Project Coordinator | Colleen McKey - mckeyc@mcmaster.ca |

PROJECT CATEGORY: EDUCATION

NURSING

Problem Based Learning (PBL) Nursing in Denmark

University College Lillebaelt is one of seven university colleges in Denmark established in January 2008. University College Lillebaelt covers part of the southern region of Denmark and has approximately 7,000 students and 700 employees. Associate Professor Charlotte Noesgaard is affiliated with the campus in Odense, which primarily educates health professionals. The baccalaureate nursing program there has been engaged in problem-based learning (PBL) for more than four years and their faculty have participated in faculty development workshops at McMaster. As their consultant, Noesgaard offered a two-week onsite institute in August 2011 with daily workshops the first week, and topic-focused discussions in the second week. When classes began she co-tutored a PBL case with second-year students to demonstrate the tutor role in PBL. Noesgaard returned in August 2012 to offer another 10-day institute. She will continue her partnership with the School of Nursing in Odense for the next two years as their faculty refine their cases and gain greater application of PBL with their students. In the spring of 2013 three faculty members from the school in Odense visited McMaster as follow up to Noesgaard's visits in Odense.

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| Collaborating Countries | Denmark |
| Collaborating Institutions | University College Lillebaelt |
| Researcher/Project Coordinator | Charlotte Noesgaard - noesgaard@mcmaster.ca |

PROJECT CATEGORY: GLOBAL PARTNERSHIP

NURSING

Central America (Strengthening Nurses, Nursing Networks and Associations (SNNAP) project of the CNA)

Assistant Professor Gladys Peachey and retired Professor Barbara Carpio have provided mentorship to the nursing associations of El Salvador and Nicaragua under the aegis of the CIDA-funded Strengthening Nurses, Nursing Networks and Associations (SNNAP) project of the CNA since 2007. The aim of the project is to strengthen nursing associations globally to act as the voice of professional nursing in their respective countries to ensure safe working conditions and quality, safe patient care. Peachey and Carpio conducted annual in-country site visits. In addition to meeting with the professional association members, they held discussions with leaders of health care agencies, CIDA representatives, ministries of health, Canadian Consul and other key stakeholders. They also conducted over 20 workshops with nurses and key stakeholders on leadership, family health care, primary health care, professional and practice standards, organizational development, toxic work environments, and gender inequity. Activities aimed at increasing the awareness of international nursing issues locally have included presentations of the project to the RNAO chapters in Halton and Hamilton; university women's clubs; church groups in the area; and to McMaster nursing students. Their work was also published in the Canadian Nurse journal. During a visit to the El Salvadorean

association in December 2011, Peachey and Carpio assisted in developing their five-year strategic plan. They also participated with the newly elected board in a national Intersectoral Round Table on Nursing at the Ministry of Health. A final visit to Nicaragua in February 2012 involved a review of AEN's survey findings of violence in nurses' workplaces and assistance with development of strategic directions to address the issue. While both associations have made gains through the SNNAP project, no continuing funding was approved by CIDA, so the current phase of the partnerships will end.

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| Collaborating Countries | El Salvador, Nicaragua |
| Collaborating Institutions | Nursing associations of El Salvador and Nicaragua, Canadian Nurses' Association |
| Researcher/Project Coordinator | Gladys Peachey- peacheg@mcmaster.ca Barbara Carpio (retired) |

PROJECT CATEGORY: EDUCATION

NURSING

Nursing Education in South Africa

The School of Nursing's Elizabeth Rideout (retired) and Wendy Sword made three visits to South Africa in 2011, and one in 2012. There were two areas of focus for these visits: the facilitation of problem-based learning (PBL) workshops, and curriculum consultation for the Department of Nursing Science at North-West University, Mafikeng Campus (NWU-Mafikeng). The four workshops were hosted by three different universities (NWU-Mafikeng, University of Pretoria, and University of Fort Hare). The workshops provided a forum for discussion as well as hands-on experience with a PBL approach to education. The Department of Nursing Science had made a decision to integrate PBL into their nursing curriculum as they moved forward with revisions to ensure congruency with new nursing qualifications set by the South African Nursing Council (SANC). The initial visits were spent primarily with the curriculum writing team from the department, and the last visit involved a week-long retreat with faculty from the department and collaborative institutions, during which time significant progress was made on revising the curriculum. The revisions are expected to be completed by early 2014, at which time the curriculum document will go forward for approval so that it is ready for implementation by the SANC deadline of June 2015. Plans for the future have been discussed and we will continue to build on the excellent relationship now established with the faculty in the Department of Nursing Science at NWU-Mafikeng.

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| Collaborating Countries | South Africa |
| Collaborating Institutions | Department of Nursing Science at North-West University, Mafikeng Campus (NWU-Mafikeng); University of Pretoria; University of Fort Hare |
| Researcher/Project Coordinator | Wendy Sword- sword@mcmaster.ca Elizabeth Rideout (retired) |

PROJECT CATEGORY: EDUCATION

NURSING

Collaboration with Aga Khan University

A memorandum of understanding was signed by McMaster University and Aga Khan University (AKU) in 2008 for a new stage to a 25-year collaboration. For years the School of Nursing has been the essential link in the partnership of the two universities, which has raised the status of nursing in Pakistan and developed international nursing schools. Under the new agreement, the two universities have partnered to support national nursing initiatives in select countries of Africa and Asia where the nursing profession has been neglected. McMaster has played a major role in assisting AKU to build capacity in health care education, particularly in nursing. The impact of the partnership to date has extended beyond Pakistan to other countries where AKU has a nursing presence including Kenya, Tanzania, Uganda, Afghanistan, Syria and Egypt, in terms of improving the quality of nursing education, and strengthening the role and recognition of women professionals and their contributions to society.

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| Collaborating Countries | Afghanistan, Egypt, Kenya, Pakistan, Syria, Tanzania, Uganda |
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| Collaborating Institutions | Aga Khan University |
| Researcher/Project Coordinator | Catherine Tompkins - tompkins@mcmaster.ca Andrea Baumann - baumanna@mcmaster.ca |

DEPARTMENT OF PATHOLOGY AND MOLECULAR MEDICINE

PROJECT CATEGORY: RESEARCH

PATHOLOGY AND MOLECULAR MEDICINE

INTERSTROKE Genetics

I am currently the Chair of INTERSTROKE Genetics, coordinating the analysis of DNA samples from the INTERSTROKE study in 22 countries.

Stroke is a major public health problem that contributes significantly to the global burden of disease. It is the most common cause of adult disability and the third leading cause of death worldwide (following coronary heart disease and cancer). An effective global strategy to reduce the risk of premature stroke mandates systematic evaluation of the contribution of the risk factors in various ethnic groups and geographical locations. The overall purpose of INTERSTROKE is to learn about the role of known risk factors (e.g. blood pressure) and emerging risk factors (e.g. genetics) for stroke in different regions of the world and ethnic groups. We will compare risk factors in people with stroke (Cases) to people without stroke (Controls) in a large, international Case-control study that will include approximately 24,000 cases and controls from more than 30 countries. INTERSTROKE will have enormous implications for our understanding of the causes of stroke worldwide. It will provide key information to help guide population health initiatives aimed at preventing stroke in low and high-income countries

Faculty of Health Sciences

Collaborating Countries 32 countries-
Argentina, Australia, Brazil, Canada,
Chile, China, Colombia, Croatia,
Denmark, Ecuador, Germany, India, Iran,
Ireland, Kuwait, Malaysia,
Mozambique, Nigeria, Pakistan, Peru,
Philippines, Poland, Russia, Saudi Arabia,
South Africa, Sudan, Sweden, Thailand,
Turkey, UAE, Uganda, UK

**Researcher/Project
Coordinator** Guillaume Pare-
pareg@mcmaster.ca

PROJECT CATEGORY: RESEARCH
PATHOLOGY AND MOLECULAR MEDICINE

Implementation of Novel Statistical Genetic Methods

Collaboration with Lund University to implement novel statistical genetic methods I have developed in large genetic consortia (MAGIC, GIANT, etc.)

Collaborating Countries Sweden

**Collaborating
Institutions** Lund University

**Researcher/Project
Coordinator** Guillaume Pare-
pareg@mcmaster.ca

PROJECT CATEGORY: RESEARCH
PATHOLOGY AND MOLECULAR MEDICINE

RE-LY Genetics

Leading the genetic analysis of the RE-LY clinical trial of dabigatran in atrial fibrillation patients. This work is done in partnership with Uppsala University (Dr. Niclas Erikson and Dr. Lars Wallentin).

Collaborating Countries Sweden

**Collaborating
Institutions** Uppsala University

**Researcher/Project
Coordinator** Guillaume Pare-
pareg@mcmaster.ca

PROJECT CATEGORY: RESEARCH
PATHOLOGY AND MOLECULAR MEDICINE

Genetics of Rheumatic Heart Disease (The RHDGen Network)

Rheumatic valve disease is a common heart condition resulting in heart failure, stroke, infective endocarditis, maternal and perinatal mortality and morbidity. Epidemiologic evidence and our studies to date provide convincing evidence that the disease results from the interaction between a host gene (or possibly genes), pharyngeal infection with group A B haemolytic streptococcus, and an environment of poverty. The vision of this proposal is to establish an African network of investigators to carry out research to identify the genes responsible for susceptibility to rheumatic heart disease, acute rheumatic fever and streptococcal pharyngitis, and determine the molecular epidemiology of the latter. The high heritability of rheumatic fever and the distinctive phenotype of rheumatic heart disease significantly enhance the likelihood of a successful outcome. Identification of the genes involved will lead to better understanding of the pathogenesis of rheumatic heart disease. Elucidation of the molecular mechanisms involved in rheumatic heart disease could also broaden our understanding of host-pathogen interactions in the development of chronic disorders more generally where the host and pathogen factors are less clearly defined. Finally, the determination of the molecular epidemiology of streptococcal pharyngitis in Africa will facilitate the development of a vaccine to prevent streptococcal infections in general.

Collaborating Countries South Africa, Namibia, Zambia, Nigeria, Mazambique, Kenya, Uganda, Sudan and United Kingdom

**Collaborating
Institutions** University of Cape Town

**Researcher/Project
Coordinator** Guillaume Pare-
pareg@mcmaster.ca

PROJECT CATEGORY: RESEARCH
PATHOLOGY AND MOLECULAR MEDICINE

Women's Genome Health Study (WGHS)

I have been a long term investigator on the Women's Genome Health Study (WGHS) involving genome-wide data on 26,000 american women prospectively for 14 years.

The primary aim of the Women's Genome Health Study (WGHS) is to create a comprehensive, fully searchable genome-wide database of >360 000 single nucleotide polymorphisms among at least 25 000 initially healthy American women participating in the ongoing NIH-funded Women's Health Study (WHS). These women have already been followed over a 12-year period for major incident health events including but not limited to myocardial infarction, stroke, cancer, diabetes, osteoporosis, venous-thromboembolism, cognitive decline, and common visual disorders such as age-related macular degeneration and cataracts. Investigations within the WGHS will seek to identify relevant patterns of genetic polymorphism that predict future disease states in otherwise healthy American women, and to evaluate patterns of genetic polymorphism that relate to multiple intermediate phenotypes including blood-based determinants

of disease that were measured at baseline for each study participant. By linking genome-wide data to the existing epidemiologic databank of the parent WHS, which includes comprehensive dietary, behavioral, and traditional exposure data on each participant since cohort inception in 1992, the WGHS will also allow exploration of gene-environment and gene-gene interactions as they relate to incident disease states. Thus, with continued follow-up of the WHS, the WGHS provides a unique scientific resource—a full-cohort, prospective, genome-wide association study among initially healthy American women.

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| Collaborating Countries | USA |
| Collaborating Institutions | Brigham and Women's Hospital, Boston, MA (teaching affiliate of Harvard Medical School) |
| Researcher/Project Coordinator | Guillaume Pare- pareg@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PATHOLOGY AND MOLECULAR MEDICINE

Treatment issues involved in leukomyelitis following spinal cord injury.

- 1. Imaging of CNS diseases in animal models.**
- 2. In vivo testing of implants into the spinal cord injury; cellular mechanisms of neuroregeneration.**
- 3. Synaptic plasticity in the brain stem of young dysmyelinated rats.**

The international collaborative research projects are conducted to develop novel animal models of spinal cord injury serving to understand cellular and molecular mechanisms of leukomyelitis, severe and protracted inflammatory response to damage that results in severe and irreversible loss of neurology function. Preliminary experiments using a novel animal model of spinal cord injury to treat leukomyelitis are currently undergoing. The other emphasis is on elucidation of cellular mechanisms involved in axonal regeneration and other neuroregenerative processes following spinal cord injury implanted with cells and synthetic materials.

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| Collaborating Countries | Poland, Czech Republic, Canada |
| Collaborating Institutions | Medical University in Lublin, Poland; The Academy of Sciences of the Czech Republic; University of British Columbia. |
| Researcher/Project Coordinator | Jacek M. Kwiecien - kwiecien@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PATHOLOGY AND MOLECULAR MEDICINE

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| Collaborating Countries | Poland, Canada (UBC) |
| Collaborating Institutions | Medical University in Lublin, Poland; University of British Columbia. |
| Researcher/Project Coordinator | Jacek M. Kwiecien - kwiecien@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PATHOLOGY AND MOLECULAR MEDICINE

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Faculty of Health Sciences

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| Collaborating Countries | Czech Republic, Belgium, Italy, France. |
| Collaborating Institutions | The Academy of Sciences of the Czech Republic; Ghent University; University of Trento; INSERM, Grenoble. |
| Researcher/Project Coordinator | Jacek M. Kwiecien - kwiecien@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PATHOLOGY AND MOLECULAR MEDICINE

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The other emphasis is on elucidation of cellular mechanisms involved in axonal regeneration and other neuroregenerative processes following spinal cord injury implanted with cells and synthetic materials.

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| Collaborating Countries | USA |
| Collaborating Institutions | University of Texas, Houston. |
| Researcher/Project Coordinator | Jacek M. Kwiecien - kwiecien@mcmaster.ca |

PROJECT CATEGORY: RESEARCH/EDUCATION/ GLOBAL PARTNERSHIP
PATHOLOGY AND MOLECULAR MEDICINE

International Cooperation in Liver Research, Pathology Education, and Best Clinical Practice

1. Research:
 - Focusing on pathogenesis of hepatocellular carcinoma
 - Identifying diagnostic biomarkers for hepatocellular carcinoma
 - Developing targeted therapeutic strategy
 - Fostering personalized medicine in hepatocellular carcinoma
2. Education:
 - Delivering international standard of pathology practice for pathologists and laboratory staff
 - Supporting pathology scholar exchanging program
 - Giving didactic seminars to pathology residents and junior pathologists, monthly
 - Topical seminars to departments of surgery and pathology
 - Advisory committee member for Masters and PhD students
3. Global partnership
 - Organizing international pathology symposium
 - Promoting clinical-pathological communication/collaboration
 - Providing guidelines for best practice in patient care
 - Chairing Quarterly Strategic Committee meeting, department of Pathology

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| Collaborating Countries | China |
| Collaborating Institutions | 1.Key State Lab of Multi-Organ Transplantation 2.Department of Hepatobiliary Surgery 3.Department of Pathology The First Affiliated Hospital College of Medicine, Zhejiang University Hangzhou, Zhejiang China |
| Researcher/Project Coordinator | Nancy Jimin Liu - nliu@haltonhealthcare.on.ca |

PROJECT CATEGORY: RESEARCH
PATHOLOGY AND MOLECULAR MEDICINE

Dengue Population Genetics Program

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| Collaborating Countries | Burma, Colombia, Honduras, Mexico Nicaragua, Sri Lanka, USA, Vietnam |
| Collaborating Institutions | University of California – Berkeley, Sustainable Sciences Institute, National Autonomous University of Honduras (UNAH), National Autonomous University of Nicaragua-Leon (UNAN), Universidad Autonoma de Nuevo Leon, University of Wisconsin-Madison, University of North Carolina at Chapel Hill, Genetech Research Institute, Nagasaki. University, Department of Medical Research (Lower Myanmar) |
| Researcher/Project Coordinator | Mark Loeb - loebm@mcmaster.ca |

Faculty of Health Sciences

PROJECT CATEGORY: EDUCATION

PATHOLOGY AND MOLECULAR MEDICINE

International Federation of Clinical Chemistry- Task Force on Pediatric Laboratory Medicine (IFCC-TFPLM)

Coordinate activities worldwide directed towards the establishment of reference intervals for laboratory test results in pediatric patients of all age groups.

Form a sound support basis for the continuation of the International Congresses of Pediatric Laboratory Medicine which have been very successful over the past 25 years.

Create a world wide network of scientists working in laboratories specialized in Pediatric Medicine.

Information on the Task Force and its members can be found on the website- <http://www.ifcc.org/task-force-paediatric-laboratory-medicine-web-pages/>

Collaborating Countries Australia, Germany, UK, USA

Collaborating Institutions Turkish Biochemical Society
European Federation of Laboratory Medicine

Researcher/Project Coordinator VijayLaxmi Grey -
greyv@mcmaster.ca

PROJECT CATEGORY: RESEARCH

PATHOLOGY AND MOLECULAR MEDICINE

Innate, Adaptive and Mucosal Immune Responses in HIV-1 Exposed Uninfected Infants: A Human Model to Understand Correlates of Immune Protection

A prospective observational cohort of HIV+ mothers and their breastfeeding infants will be developed and will provide a comprehensive evaluation of the immunologic factors and mechanisms that prevent HIV transmission.

Within this study, a unique opportunity exists to expand our understanding of the factors that would interfere with breastfeeding and the willingness of mothers in developing countries to enroll their infants into vaccine trials. There is currently no information available to inform the vaccine community on the potential to enroll infants into trials. We aim to identify and describe the barriers and enablers of adherence to feeding guidelines amongst HIV+ women and what parameters mothers would consider in evaluating whether to enroll their HIV uninfected infants into HIV vaccine research.

Collaborating Countries South Africa, Nigeria, Canada

Collaborating Institutions

University of Cape Town, Republic of South Africa
Stellenbosch University, Republic of South Africa
Plateau State Human Virology Research Center (PLASVIREC), Nigeria
Plateau State Specialist Hospital (PSSH), Nigeria
University of Manitoba, Winnipeg, Manitoba, Canada
University of Ottawa, Ottawa, Ontario, Canada
University of British Columbia, Vancouver, B.C., Canada

Researcher/Project Coordinator Kenneth Rosenthal -
rosenthl@mcmaster.ca

DEPARTMENT OF PEDIATRICS

PROJECT CATEGORY: RESEARCH/EDUCATION

GLOBAL PARTNERSHIP

PEDIATRICS

MUG CHAI - McMaster University Global Child Health Initiative

Collaboration to educate and promote global child health initiatives within the Department of Pediatrics.

Collaborating Countries Botswana, Guyana, Uganda

Collaborating Institutions University of Botswana

Researcher/Project Coordinator David Goldfarb- goldfar@mcmaster.ca
Andrea Hunter- hunteaj@mcmaster.ca
April Kam - kama@mcmaster.ca
Jeffery Pernica-
pernica@mcmaster.ca
Katrin Scheinemann-
kschein@mcmaster.ca

PROJECT CATEGORY: EDUCATION

PEDIATRICS

Pediatric Residency Training Program Development and Implementation in Georgetown, Guyana

The Guyana Paediatric Residency Program is a three-year training program (Masters degree), certified by the University of Guyana and recognized by the Guyana Medical Council. The purpose of the program is to train consultant pediatricians capable of providing optimal care for children within an evolving resource setting in Guyana. Currently the program accommodates three residents in each academic year.

Clinical training involves rotations through paediatric ward, neonatal nursery, paediatric clinics, as well as a number of other clinical services including Accident & Emergency department, surgical subspecialties, infectious diseases and public health. Applicants to the program are expected to have a medical degree, have completed an internship year and a minimum of one year of post-internship experience in clinical pediatrics.

The academic curriculum consists of academic half-days with didactic and problem-based learning sessions, weekly case discussions, participate in teleconferenced tertiary care paediatric grand rounds, protocol/clinical guideline development and involvement in clinical research. With the generous support of a not-for-profit organization: 'Guyana Help the Kids' (GHTK), significant infrastructural improvements are being made to the paediatrics and neonatal wards at GPHC. Along with paediatric nursing educational support from the Pan American Health Organization (PAHO), we hope these system-based improvements will complement the post-graduate training program to overall improve clinical care.

Collaborating Countries Guyana

Collaborating Institutions Georgetown Public Hospital Corporation (GPHC) and University of Guyana with Guyana Help the Kids organization (based in Canada) and physicians from McMaster University (McMaster Children's Hospital), University of Toronto (Hospital for Sick Children) and Humber River Regional Hospital

Researcher/Project Coordinator Andrea Hunter - hunteaj@mcmaster.ca

PROJECT CATEGORY: EDUCATION/GLOBAL PARTNERSHIP

PEDIATRICS

Health Volunteers Overseas Pediatric Emergency Medicine Medical Education Collaborative

Standing volunteer opportunity for Pediatricians to go to Viex Fort, St. Lucia and Managua, Nicaragua through HVO for medical education and clinical purposes. (e.g. lectureships, teaching resuscitation, etc)

Collaborating Countries Nicaragua, St. Lucia

Collaborating Institutions Health Volunteers Overseas – Universidad Americana, Universidad Nacional Autonoma de Nicaragua, Hospital Infantil Manuel de Jesus Rivera, St Jude Hospital

Researcher/Project Coordinator April Kam - kama@mcmaster.ca

PROJECT CATEGORY: RESEARCH

PEDIATRICS

An International Study to Develop a Patient-Reported Outcome Instrument for Cleft-Lip and/or Palate Patients: The CLEFT-Q(CIHR)

Our international team of experts from Canada, USA and England has coalesced to develop a new patient-reported outcome (PRO) instrument for patients with CLP called the CLEFT-Q. Once developed, the CLEFT-Q will be used to document the outcomes of cleft treatment (which can take all of childhood to complete), support patient advocacy (e.g., by humanitarian surgical missions who provide a substantial amount of cleft care in LMICs), clinical audit for quality improvement, and local, national and international research efforts. Furthermore, using the scales in clinical practice will provide patients with the opportunity to report their concerns directly to their healthcare providers, who can use patients' results in real-time clinical decision making, in conjunction with objective measures, to improve overall outcome. We just received a 5-year CIHR grant to fund this study.

Collaborating Countries UK, USA, Kenya, India, Philippines

Collaborating Institutions Spires Cleft Centre (UK), Birmingham Children's Hospital (UK), Hospital for Sick Children, Duke University Hospital (USA), Hasbor Children's Hospital (USA)

Researcher/Project Coordinator Anne Klassen - aklass@mcmaster.ca

Faculty of Health Sciences

DEPARTMENT OF PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

PROJECT CATEGORY: EDUCATION
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

International Study of Student Career Choice in Psychiatry (ISoSCCiP)

Comparing international trends in recruitment of medical students to psychiatry. The study will comment on effective recruitment mechanisms to promote psychiatry as a career.

Collaborating Countries UK, Canada, Australia & New Zealand, Croatia, France, Germany, India, Iraq, Israel, Italy, Japan, South Africa, Switzerland, Czech Republic, Netherlands, USA

Collaboration Institutions The Royal College of Psychiatrists, UK

Researcher/Project Coordinator Karen Saperson - saperson@mcmaster.ca

DEPARTMENT OF REHABILITATION SCIENCE

PROJECT CATEGORY: RESEARCH
REHABILITATION SCIENCE

Development and Evaluation of an Online Workshop to Increase Physician Knowledge About Children with Developmental Coordination Disorder

A team of researchers and expert physicians from Canada and the United Kingdom will develop a comprehensive on-line workshop that incorporates recent research evidence and that will assist physicians from both countries in identifying and diagnosing children who have developmental coordination disorder (DCD). The workshop will provide a user-friendly overview of DCD and will support physicians in acquiring the skills and knowledge necessary for effective management of these children and in gaining the confidence to apply these skills in practice. Once tested, the workshop will be available at no charge on the CanChild website <http://dcd.canchild.ca/en/> so that it may be accessed by physicians from other English speaking countries around the world.

Collaborating Countries UK

Collaboration Institutions Newport University, Wales, United Kingdom, Waterloo Foundation

Researcher/Project Coordinator Cheryl Missiuna - missiuna@mcmaster.ca

PROJECT CATEGORY: EDUCATION/RESEARCH
REHABILITATION SCIENCE

Promoting optimal learning and student success in the global health experiential practicum for physiotherapy and occupational therapy students July 2011 – December 2012

International practica resonate with the value and focus that McMaster is placing on internationalization. Through our students, it provides an opportunity to promote McMaster globally. Furthermore, this experience will impact the students' professional practice by increasing their recognition of and openness to inclusivity and diversity in our multicultural society. Thus, the success and quality of this international clinical practicum is important.

Project Objectives:

The overarching objectives of this project were to identify learning benefits and develop recommendations and strategies to implement within this international course that will optimize future students' learning, safety and wellbeing when participating in an international clinical practicum.

The specific goals were:

1. To identify the successes and challenges that PT and OT students encounter when completing the clinical practicum course internationally;
2. To understand students' motivation to participate in this experience;
3. To explore students' critical learning events and narrative stories from the international context;
4. To understand students' perceptions of the learning that occurred;
5. To develop and implement recommendations and strategies to support future students' success throughout this learning experience.

Collaborating Countries England, Kenya, Tanzania, USA

Collaboration Institutions Kenyan Working Group, Kenya; University of Kentucky, USA; University of Michigan, USA; Tanzania Stoke Mandeville Hospital, UK

Researcher/Project Coordinator Lynne Geddes - geddesl@mcmaster.ca
Lorie Shimmell - shimmelj@mcmaster.ca
Patty Solomon - solomon@mcmaster.ca

Faculty of Health Sciences

PROJECT CATEGORY: RESEARCH/GLOBAL PARTNERSHIP
REHABILITATION SCIENCE

Development of a culturally sensitive community-based rehabilitation program for people living with musculoskeletal diseases in the Mayan community of Chankom, Yucatán, México

Development of community based rehabilitation programs directed to improve functioning and quality of life in people suffering from musculoskeletal diseases and live in underserved regions. This project is based on the principles of Community-based Participatory Research.

Collaborating Countries Mexico

Collaboration Institutions Hospital General de México
Universidad Nacional Autónoma de México
Universidad Anáhuac-Mayab

Researcher/Project Coordinator Julie Richardson - jrichard@mcmaster.ca
Seanne Wilkins - swilkins@mcmaster.ca
John Lavis - lavisj@mcmaster.ca
Mike Wilson - wilsom2@mcmaster.ca

PROJECT CATEGORY: RESEARCH/EDUCATION
REHABILITATION SCIENCE

The Occupational Therapy Education and Practice Preparation Program (OTepp)

The focus of the Occupational Therapy Examination and Practice Preparation (OTepp) Program is to assist internationally educated occupational therapists (IETs) as they seek to transition into practice in Canada. The Canadian Association of Occupational Therapists (CAOT). The core curriculum includes gaining knowledge of theoretical practice frameworks, ethics and evidence in practice, and core information as outlined in the national examination blue print. Participants will need to achieve an average of 60% on all assignments in order to pass the core course, which has received certificate status from the Senate, McMaster University. The funded research project will be completed at the end of July 2013. Further funding has been sought for the next stage of development.

Collaborating Countries India, Philippines, South Korea, Japan, U.S, U.K, Ireland, Dubai

Collaboration Institutions McMaster University, Canadian Association of Occupational Therapists (CAOT), Universities of Ottawa, Manitoba, British Columbia, Alberta, OEQ

Researcher/Project Coordinator Sue Baptiste - baptiste@mcmaster.ca

PROJECT CATEGORY: EDUCATION
REHABILITATION SCIENCE

Facilitator Training in a Problem-based Learning Context

Continuing relationship between McMaster and Clinica Allemana for initial facilitator training, ongoing consultation and periodic face-to-face mutual visits to ensure currency and a progressive approach to PBL, SDL and adult learning principles application

Collaborating Countries Chile

Collaborating Institutions Clinica Allemana (Santiago)

Researcher/Project Coordinator Sue Baptiste - baptiste@mcmaster.ca

PROJECT CATEGORY: EDUCATION
REHABILITATION SCIENCE

Train the OT (Occupational Therapy) Educators

An online and face-to-face short course was created and provided in China to train rehabilitation educators in clinical reasoning and the occupation based client centered approaches to occupational therapy, as well as to familiarize them with adult learning methods of teaching these approaches. 2013 is the third year in which this program has been offered. This short programme has been requested in other parts of the world e.g. Pakistan, Malaysia, Argentina work is commencing to disseminate the model elsewhere.

Collaborating Countries China, Hong Kong, Canada, Norway, New Zealand

Collaborating Institutions World Federation of Occupational Therapists; Norwegian Mission Association; McMaster University; University of Toronto; Otago Technical University; Hong Kong Polytechnic University; Chinese Association of Rehabilitation Medicine

Researcher/Project Coordinator Sue Baptiste - baptiste@mcmaster.ca

PROJECT CATEGORY: EDUCATION
REHABILITATION SCIENCE

Targeting the Globe: Developing Evidence-Based Student Internationalization in Occupational Therapy

Student occupational therapists will:
a) develop a series of recommendations for best practice for educational preparation of globally-bound SOTs; b) disseminate findings that reflect global and culturally-sensitive perspectives; and, c) design appropriate curriculum for use by participating occupational therapy educational programs. A literature review will be completed; data will be collected from an online questionnaire and Skype interviews; easily accessed knowledge translation materials will be developed. The World Federation of Occupational Therapists (WFOT) is discussing their role at the upcoming Executive meeting in Ankara, Turkey (May 25-31) of connecting the investigators and participating countries.

Collaborating Countries U.S, U.K, Germany, India, Mauritius, Tanzania, Bhutan

Collaborating Institutions World Federation of Occupational Therapists. University occupational therapy programs and placement sites in the participating countries: e.g. Leeds Met University.

Researcher/Project Coordinator Lorie Shimmell - shimmelj@mcmaster.ca
Sue Baptiste - baptiste@mcmaster.ca

PROJECT CATEGORY: EDUCATION
REHABILITATION SCIENCE

Partnerships for Education in Bhutan

We are developing a partnership with the Disabled Persons Association of Bhutan to increase research and education linkages. An executive member on the Association was Dr. Solomon's graduate student and she made a site visit to Bhutan in 2012 to begin the dialogue. Two students will be doing fieldwork in the summer of 2013. In addition, the Association in collaboration with faculty members in the School of Rehabilitation Science submitted a project to Grand Challenges Canada to enable access to schools for children living with disabilities in Bhutan.

Collaborating Countries Bhutan

Collaborating Institutions Disabled Persons Association of Bhutan

Researcher/Project Coordinator Patty Solomon - solomon@mcmaster.ca
Sarah Wojkowski - wojkowski@mcmaster.ca
Lorie Shimmell - shimmelj@mcmaster.ca

PROJECT CATEGORY: RESEARCH
REHABILITATION SCIENCE

Exploring the Functioning, Disability and Health of Women and Men Living with HIV in Zambia: Shifting Perspectives for a Longer Term Approach to HIV Care In Southern Africa

We are conducting a longitudinal study on the disability experienced by men and women living with HIV in urban and rural areas of Zambia.

Collaborating Countries Zambia

Collaboration Institutions University of Toronto
University of Zambia

Researcher/Project Coordinator Patty Solomon - solomon@mcmaster.ca

PROJECT CATEGORY: EDUCATION
REHABILITATION SCIENCE

Occupational Therapy Educational Partnerships

We have developed an agreement with LaTrobe University in which their OT students have ongoing access to our online course base masters courses commencing fall 2013.

Collaborating Countries Australia

Collaboration Institutions La Trobe University

Researcher/Project Coordinator Patty Solomon - solomon@mcmaster.ca

DEPARTMENT OF SURGERY

PROJECT CATEGORY: EDUCATION/GLOBAL PARTNERSHIP
SURGERY

Norman Bethune Society China-Canada Collaborative

A delegation of urologists went from Canada to Changsha in November, 2012 to perform urologic surgery. Participated in Norman Bethune Society China-Canada collaborative. Dr. Chin performed a radical prostatectomy, Dr. Kapoor performed a laparoscopic partial nephrectomy, and Dr. MacNeily performed a hypospadias repair. The experience was enriching to all participants.

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| Collaborating Countries | China, Canada |
| Collaborating Institutions | University British Columbia, University of Western |
| Researcher/Project Coordinator | Anil Kapoor - akapoor@mcmaster.ca |

PROJECT CATEGORY: EDUCATION/GLOBAL PARTNERSHIP
SURGERY

Annual Saudi Urologic Meeting

A delegation of urologists from Canada attended the annual Saudi urologic meeting in Abha, Saudi Arabia in April, 2013 and participated in urologic surgeries. Exchange of ideas and surgical techniques was valuable for both countries.

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| Collaborating Countries | Saudi Arabia |
| Researcher/Project Coordinator | Anil Kapoor - akapoor@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
SURGERY

CABG Off or On Pump Revascularization Study (CORONARY)

A large, international, prospective, randomized controlled trial with blinded and adjudicated outcome assessments, to determine whether off-pump CABG surgery compared to on-pump CABG surgery reduces major clinical vascular events in the short term (30 days) and whether the benefits are maintained at long term (5 years) in patients undergoing isolated CABG surgery. A total of 4752 patients were recruited in this study. 30-day results and 1-year results have been published at New England Journal of Medicine (NEJM). We are in the long-term follow up period.

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| Collaborating Countries | Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Czech Republic, Estonia, France, India, Netherlands, Italy, Sweden, Turkey, Ukraine, United States, United Kingdom, Uruguay |
| Researcher/Project Coordinator | Andre Lamy - lamya@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
SURGERY

2nd Evidence Based Surgery Workshop

The Evidence Based Surgery (EBS) workshops organized by SOURCE are a part of multidisciplinary endeavours of the Department of Surgery. The main objective of these workshops is to promote the use of best evidence to guide decision making in surgeons from various sub-specialties. The workshops are based on an ongoing series of instructional articles that are being published in the Canadian Journal of Surgery (CJS). The articles are written to serve as "User's guide" to the Surgical Literature that teach clinicians how to appraise and apply evidence to everyday clinical practice. The SOURCE workshops are popular for their interactive, problem based learning format where the participants have opportunities to ask questions and work in small groups with surgeon tutors who are experts in research methodology.

Workshop Objectives:

1. To train surgeons at KFSH&RC in Evidence Based Surgery principles
2. To enhance surgeons' understanding of epidemiological and methodological issues when conducting research in surgical areas
3. To facilitate the integration of the individual surgeon's clinical experience with the best evidence obtained through a systematic search and evaluation of the literature to improve patient care.
4. Allow for methodological experts from SOURCE, McMaster University and KFSH&RC to collaborate and discuss current issues in the field

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| Collaborating Countries | Canada, Kingdom of Saudi Arabia |
| Collaborating Institutions | McMaster University, King Faisal Specialist Hospital and Research Centre (Jeddah, Saudi Arabia) |
| Researcher/Project Coordinator | Achilleas Thoma- athoma@mcmaster.ca |

PROJECT CATEGORY: EDUCATION/RESEARCH/
GLOBAL PARTNERSHIP
SURGERY

Supporting Postgraduate Surgical Training in Guyana

Guyana has a large burden of untreated surgical disease and has suffered a loss of medical manpower. The jointly developed and locally delivered Postgraduate Diploma in Surgery program has graduated 14 Guyanese surgeons since 2006. Trauma Team Training courses have been delivered and evaluated, research projects have been presented by program graduates at international conferences, and clinical programs in plastic surgery, endoscopy and trauma have been developed. In 2013, Guyanese surgeons will undertake clinical fellowships through McMaster in Thoracic Surgery and General Surgery. The goal of this partnership is to improve surgical care in Guyana, support clinical and education research, and make the training programs locally sustainable.

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| Collaborating Countries | Guyana |
| Collaborating Institutions | University of Guyana Institute for Health Science Education Georgetown Public Hospital Association Canadian Association of General Surgeons Canadian Network for International Surgery |
| Researcher/Project Coordinator | Brian H. Cameron - cameronb@mcmaster.ca |

PROJECT CATEGORY: EDUCATION/RESEARCH
SURGERY

Pediatric Surgery Visiting Scholars

The McMaster Division of Pediatric Surgery hosted a Nigerian pediatric surgeon sponsored by the World Federation of Associations of Pediatric Surgeons as a Visiting Scholar for 3 months in 2010, and a second Nigerian pediatric surgeon in 2012. They attended local Trauma and Laparoscopic training courses, observed pediatric surgery, and learned about the Canadian health system. A collaborative Nigeria-Canada survey of colostomies was presented nationally and several joint review articles have been published.

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| Collaborating Countries | Nigeria |
| Collaborating Institutions | World Federation of Associations of Pediatric Surgeons (WOFAPS) Association of Pediatric Surgeons Of Nigeria Canadian Association of Paediatric Surgeons |
| Researcher/Project Coordinator | Brian H. Cameron - cameronb@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
SURGERY

Disability Averted by Pediatric Surgery (DAPS)

Advocacy for limited resources, whether in Low and Middle Income Countries (LMICs) or in Canada, requires scientific evidence as well as a common metric across disciplines. Such a metric has been recently provided by the concept of Disability-Adjusted Life Years (DALYs) within the framework of global burden of disease (GBD). The use of these concepts allows surgeons to document the cost-effectiveness and value of surgical interventions across disciplines. There are currently no data using this methodology for pediatric surgery, neither in Canada nor in LMICs. This study will describe pediatric surgical practice in both Canada and Kenya using the GBD framework, and compare the burden of surgical disease between the 2 settings. Besides introducing the methodology into a surgical subspecialty, the study will be an international collaboration uniquely fostering joint learning across the north-south divide.

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| Collaborating Countries | Kenya |
| Collaborating Institutions | BethanyKids at Kijabe Hospital, Kenya |
| Researcher/Project Coordinator | Brian H. Cameron - cameronb@mcmaster.ca Julia Pemberton PhD(c) - pemberj@mcmaster.ca Dan Poenaru - dpoenaru@gmail.com |

PROJECT CATEGORY: EDUCATION/GLOBAL PARTNERSHIP
SURGERY

Plastic Surgery Outreach

Dr. Carolyn Levis assisted with clinical care in Haiti following the 2010 earthquake, and contributed to interprofessional education sponsored through the CBIE. She subsequently visited Guatemala, with a clinical team to provide education, surgery and education for children with congenital, traumatic and burn injuries due to the upper extremity. Senior Plastic Surgery Residents are encouraged to join one of the international organizations to perform cleft lip and palate reconstructive surgery for 2-week clinical electives. In the past several years they accompanied teams to Cambodia, China and India.

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| Collaborating Countries | Cambodia, China, Guatemala, Haiti, India |
| Collaborating Institutions | Canada-Haiti Academic Projects Scholarship (CBIE), St. Joseph's International Outreach Program, Operation Smile, Operation Rainbow, Guatemal Healing Hands Outreach |
| Researcher/Project Coordinator | Carolyn Levis- levisc@mcmaster.ca Nick Strumas- nstrum@mcmaster.ca |

PROJECT CATEGORY: GLOBAL PARTNERSHIP
SURGERY

Medical Ministry International (MMI)

Dr. Isaza participated in a mission to Bolivia with Medical Ministry International (MMI), a non-profit organization whose purpose is to provide medical care to the world's poor by mobilizing volunteers on short term medical projects, as well as establishing and equipping permanent medical centres throughout the world. The MMI team consisted of 65 members from the United States and Canada, working together to provide medical and surgical eye care services to the poor in Santa Cruz, Bolivia, as well as its surrounding districts. During her time in Bolivia, residents and medical students from McMaster participated in a mixture of clinic activities, surgeries, and minor procedures. The procedures ranged from pterygium excisions to entropion repairs and extracapsular cataract extractions. In total, over the two-week mission trip, the entire team was able to serve more than 4000 patients, distribute thousands of glasses, and perform more than 150 surgeries.

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| Collaborating Countries | Canada, United States, Bolivia |
| Researcher/Project Coordinator | Gloria Isaza - isazazgm@univmail.cis.mcmaster.ca |

PROJECT CATEGORY: RESEARCH
SURGERY

FAITH: Fixation using Alternative Implant for the Treatment of Hip fractures

FAITH is an international, multi-centre randomized controlled trial with 12 sites in Canada, 41 in the USA and 30 internationally (Australia, Germany, India, Norway and the Netherlands). The primary objective of the trial is to assess the impact of sliding hip screws and cancellous screws on revision surgery rates in patients above the age of 50 with femoral neck fractures. Secondary objectives include assessing the impact on health-related quality of life, deaths, and other adverse events. Hip fractures are associated with a 30% mortality rate and profound temporary, and sometimes permanent, impairment of independence and quality of life; with their growing prevalence, it is necessary to establish more compelling clinical guidance for treating these fractures.

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| Collaborating Countries | Canada, United States, Australia, Germany, India, Norway, the Netherlands |
| Researcher/Project Coordinator | Mohit Bhandari - bhandam@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
SURGERY

FLOW: Fluid Lavage of Open Wounds

Open fractures are often complicated by infections, wound healing problems and failure of fracture healing—many of which necessitate a re-operation. FLOW is an international multi-centered trial comparing the impact of different irrigation solutions and pressure on re-operation rates, patient function, and quality of life in patients treated for open fractures. Since recruitment began in July 2009, sites from Canada, Australia, Norway, the USA and India have been enlisted to facilitate the study. We have enrolled over 2,100 patients, our target is 2,520. The primary objectives are (1) to determine if there is any difference in the effects of solutions on re-operations within one year after initial surgery; and (2) to determine if there are any differences in effects of the irrigation pressures on re-operations within one year after initial surgery. The secondary objective is to determine the impacts of various solutions and irrigation pressure on patient function and quality of life one year after the initial surgery.

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| Collaborating Countries | Canada, Australia, Norway, United States, India |
| Researcher/Project Coordinator | Mohit Bhandari - bhandam@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
SURGERY

HEALTH: Hip Fracture Evaluation with Alternatives of Total Hip Arthroplasty versus Hemi-Arthroplasty

HEALTH is an international, multi-centre randomized controlled trial which compares rates of revision surgery and quality of life 24 months after total hip arthroplasty (THA) or hemi-arthroplasty (HA) in patients over 50 years of age who have sustained a displaced femoral neck fracture. Surgeons across North America, Europe, and Australia will recruit 1,434 patients with displaced femoral neck fractures requiring arthroplasty as a definitive treatment. The expertise-based trial represents a major international effort to definitively resolve the treatment of femoral neck fractures.

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| Collaborating Countries | North America, Australia, Norway, the Netherlands |
| Researcher/Project Coordinator | Mohit Bhandari - bhandam@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
SURGERY

INORMUS: Indian Orthopaedic Multicenter Study in Fracture Care

INORMUS is looking to determine the characteristics of injury and the treatments utilized for orthopaedic patients presenting to emergency departments of hospitals in India. INORMUS will provide more precise estimates of orthopaedic injury burden in India, assist in explaining the rationale for treatment and any differences across hospital systems, and improve our understanding of the management of orthopaedic trauma, particularly the impact of surgical timing on patient outcomes. At present, 5,000 patients have already been enrolled across 8 different sites in India. Due to this success, the study has not only expanded target recruitment rate to 10,000 in India, but has also added international sites across the globe.

Collaborating Countries India, Nepal, Egypt, Pakistan, Mexico, Brazil, Nicaragua, Uganda, Ghana, Tanzania, Ethiopia, Haiti

Researcher/Project Coordinator Mohit Bhandari - bhandam@mcmaster.ca

PROJECT CATEGORY: RESEARCH
SURGERY

Outcomes Following Anterior Approach to Total Hip Arthroplasty: A Multi-Centre Observational Cohort Study

This is a new multicentre study with 15 sites (mostly situated in the US). The primary objective of this study is to compare the functional outcomes, as determined by the Hip disability and Osteoarthritis Outcome Score (HOOS) questionnaire, between patients treated with either an anterior, posterior, or anterolateral approach to THA. This study will include 700 patients (500 patients with the anterior approach, 100 patients with the anterolateral approach and 100 patients with the posterior approach). Currently, 40 patients have been recruited at one site and 3 more starts will be starting in May 2013.

Collaborating Countries Canada, United States

Researcher/Project Coordinator Mohit Bhandari - bhandam@mcmaster.ca

PROJECT CATEGORY: RESEARCH
SURGERY

PARITY: Prophylactic Antibiotic Regimens in Tumor Surgery

Multicenter, blinded, randomized controlled trial, using a parallel two-arm design to investigate whether long-duration (5 days) postoperative prophylactic antibiotics will decrease the rate of infection compared to short duration (24 h) among patients undergoing surgical excision and endoprosthetic reconstruction of lower-extremity primary bone tumors. The primary outcome will be rates of deep postoperative infections in each arm, and secondary outcomes will include type and frequency of antibiotic-related adverse events, patient functional outcomes and quality-of-life scores, reoperation and mortality.

Collaborating Countries Canada, United States, Argentina

Collaborating Institutions University of Toronto, McGill University, University of Ottawa, University of British Columbia, University of Montreal, Vanderbilt University, University of Utah, SUNY Upstate Medical University, University of Medicine and Dentistry of New Jersey, Harvard University, Cornell University, Universidad Austral

Researcher/Project Coordinator Michelle Ghert, Associate Professor - michelle.ghert@jcc.hhsc.ca

PROJECT CATEGORY: EDUCATION/GLOBAL PARTNERSHIP
SURGERY

Operation Rainbow

Operating on over 50 local Armenian patients and teaching local surgical residents.

Collaborating Countries Armenia

Collaborating Countries Yerevan State University

Researcher/Project Coordinator Nasimul Huq - nshuq1@hotmail.com

PROJECT CATEGORY: EDUCATION/GLOBAL PARTNERSHIP
SURGERY

International Outreach Programs Uganda and Haiti - Surgery

The longstanding partnership between the IOP and the 3 main medical training centres in Uganda (Makerere, Mbarara, Gulu) has recently been expanded to include surgical collaborators. The Head of Surgery at Kampala's Mulago Hospital visited Hamilton in 2011, and Ugandan surgical leaders met with colleagues in Hamilton in 2012 at the Side-By-Side conference to establish priorities for collaboration. Dr. Petrisor visited Kampala with a McMaster orthopedic resident and an operating room nurse in October 2012 to help deliver a training workshop in Internal Fixation of Fractures (Sawbones) and Operating Room Nurse training workshop. Dr. Petrisor also visited Haiti after the earthquake with the IOP to provide clinical care and assess training and equipment needs. A Haitian surgeon and nurse subsequently visited Hamilton to learn about our trauma and emergency services.

Collaborating Countries Uganda, Haiti

Collaborating Institutions St. Joseph's International Outreach Program (IOP)
Global Partners in Anesthesia and Surgery
Uganda Sustainable Trauma Orthopaedic Program (USTOP),
University of British Columbia,
Department of Orthopaedics
Canadian Association of General Surgeons
Canadian Network for International Surgery
CBIE Canada-Haiti Academic Projects
Scholarship

Researcher/Project Coordinator Brad Petrisor - petrisor@HHSC.CA
Brian H. Cameron - cameronb@mcmaster.ca

PROJECT CATEGORY: EDUCATION
SURGERY

Advanced Trauma Course/ATC

Dr. Faidi visited Libya on two occasions (one week in October 2012 and a further week in March 2013), serving as Director of ATC sessions (the ATC is similar to the Advanced Trauma Life Support/ATLS Course). The sessions included contributions by approximately 72 surgical specialists from the UK, Qatar and Canada in fields including orthopaedic surgery, general surgery and anesthesia. Course materials (in the form of reading components) were sent to the participants in Libya prior to the Course taking place to help prepare them for sessions which included core lectures, skills stations, a course pre-test and a final assessment with clinical scenarios. The success rate was 100%, with the Course very well-received by all concerned. As a result, the Libyan Ministry of Health plans to continue to sponsor similar offerings in future.

Collaborating Countries Libya, UK, Canada, Qatar

Researcher/Project Coordinator Samir Faidi - faidi@hhsc.ca

PROJECT CATEGORY: EDUCATION/GLOBAL PARTNERSHIP
SURGERY

Improving Trauma Care in Libya

During the Libyan conflict in 2011, McMaster trauma surgeon Dr. Samir Faidi, traveled to Misratah to volunteer 2 weeks to care for injured victims of the war. He has since returned annually and has developed a Trauma Training program that he delivers to Libyan surgeons and health professionals to improve trauma care. He has made presentations locally to students in the MD and Global Health MSc programs.

Collaborating Countries Libya

Researcher/Project Coordinator Samir Faidi - faidi@hhsc.ca

PROJECT CATEGORY: EDUCATION/RESEARCH
SURGERY

Delivery of Surgical Care in Angola

Dr. Foster, a graduate McMaster's first MD class and Clinical Associate Professor, has served his career as a surgeon and educator in Angola. He has welcomed and taught numerous McMaster and other Canadian medical students and residents, and was awarded the Teasdale-Corti Humanitarian Award of the Royal College of Physicians and Surgeons of Canada in 2010.

Two McMaster students visited Dr. Foster in 2010 and completed a study on task-shifting of surgical care to trained nurses, which was presented at the Canadian Surgery Forum.

Collaborating Countries Angola

Collaborating Countries Centro Evangelico de Medicina de Lubango (CEML)

Researcher/Project Coordinator Stephen Foster - stephen@fosterangola.ca

PROJECT CATEGORY: RESEARCH
SURGERY

Left Atrial Appendage Occlusion Study III (LAAOS III)

LAAOS III is an international, multi-centre, randomized study and will enrol 4,700 adult patients with atrial fibrillation who are undergoing cardiac surgery requiring cardiopulmonary bypass from approximately 70 centres worldwide. Patients will be randomized to either undergo left atrial appendage occlusion or no left atrial appendage occlusion and will be followed for a mean of 4 years. The primary objective is to examine the impact of left atrial appendage occlusion on the incidence of stroke or systemic arterial embolism over the duration of follow-up.

Collaborating Countries Australia, Brazil, Canada, China, Colombia, Czech Republic, Germany, Italy, Netherlands, Spain, United Kingdom, United States

Researcher/Project Coordinator Richard Whitlock - petrisor@HHSC.CA
Stuart Connolly - stuart.connolly@phri.ca

PROJECT CATEGORY: RESEARCH
SURGERY

Steroids in Cardiac Surgery (SIRS) Trial

SIRS is a multi-centre, international, randomized, double-blind, placebo-controlled trial of 7,500 high-risk adult patients undergoing cardiac surgery with the use of cardiopulmonary bypass (CPB). Patients are randomly allocated to receive 500 mg of methylprednisolone divided into two intravenous doses of 250 mg each, one during anesthetic induction and the other on CPB initiation, or a matching placebo. The primary outcome is all-cause mortality at 30 days post-surgery. The most important secondary outcome is incidence of a composite of significant myocardial injury or death at 30 days. Patients are followed-up for 6 months post-surgery.

Collaborating Countries Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, China, Colombia, Czech Republic, Greece, Hong Kong, India, Iran, Ireland, Italy, Spain, United States

Researcher/Project Coordinator Richard Whitlock - petrisor@HHSC.CA

Faculty of Humanities



Faculty of Humanities

SCHOOL OF ARTS

PROJECT CATEGORY: RESEARCH/EDUCATION
ARTS

“Fierce: Women’s Hot-Blooded Film/Video”

Art Exhibition of film, video art, and installation works at the McMaster Museum of Art (2010) and toured to the Robert McLaughlin Gallery, Oshawa (2011).
-Funding by SSHRC (Standard Research Grant) for the exhibition research.
-Exhibition Book (2010) with essay contributions from Hladki and Canadian and US based scholars. The book has been used in course syllabi at McMaster, University of California San Diego, and the University of Ottawa.
-Class visits and tours to the exhibition.
-4000 visitors.
-Indigenous scholar, Dr. Jolene Rickard (Cornell) invited as guest speaker.
-Reviewed in The Toronto Star, The Hamilton Spectator, and Prefix Photo: A Publication of the institute of Contemporary Art.

Collaborating Countries Canada, United States

Collaborating Institutions Ithaca College, New York
University of California, Irvine
Cornell University
OCAD University
York University
University of Toronto
University of British Columbia
University of Victoria
Vtape (centre for media works by artists)
Canadian Filmmakers Distribution Centre

Researcher/Project Coordinator Janice Hladki - hladjkij@mcmaster.ca

DEPARTMENT OF ENGLISH AND CULTURAL STUDIES

PROJECT CATEGORY: RESEARCH
ENGLISH AND CULTURAL STUDIES

“Postcolonial Intimacies”

We organized a speakers series and ultimately coedited a special issue of Interventions: Journal of Postcolonial Studies, published in 2013.

Collaborating Countries Australia, Canada, Hong Kong, South Africa, UK, US

Collaborating Countries City University Hong Kong
University of the Free State, SA
St. Mary’s (Canada)
Goldsmiths, University of London
King’s College, University of London
Lancaster University
Liverpool John Moores
University of Adelaide
York University (Canada)
Simon Fraser University
University of British Columbia, Okanagan
University of Minnesota

Researcher/Project Coordinator Sarah Brophy - brophys@mcmaster.ca
Helene Strauss - strauss@mcmaster.ca

PROJECT CATEGORY: RESEARCH
ENGLISH AND CULTURAL STUDIES

Brown Terror: 9/11 through South Asian Cultural Representations

This research examines post-9/11 South Asian cultural representations concurrently with transgenerational and transnational memories of Hindu-Sikh-Muslim encounters at the 1947 Partition of British India and the 1984 anti-Sikh riots in India. 9/11, this study argues, reanimated an entangled discourse of Muslim and Sikh terrorism and victimhood that has its origins in past national traumas. It reveals how travelling memories of past national traumas exert pressure and shape cross-cultural communities in the post-9/11 era. This research is supported by a Social Sciences and Humanities Research Council of Canada (SSHRC) Standard Research Grant.

Collaborating Countries US, Canada, India

Researcher/Project Coordinator Chandrima Chakraborty - chandri@mcmaster.ca

PROJECT CATEGORY: RESEARCH/EDUCATION/GLOBAL PARTNERSHIP
ENGLISH AND CULTURAL STUDIES

Understanding Canada Workshop Conference

Understanding Canada is a weekend workshop conference that is bringing 17 international scholars of Canadian literatures to McMaster to present their work publicly, but also to workshop recent research towards the production of an edited book, all on the topic of the recently discontinued Understanding Canada program and the future of international study of Canadian literatures.

Collaborating Countries Australia, Brazil, Canada, Czech Republic, France, Great Britain, Germany, Hungary, Jamaica, Serbia, Slovakia, Spain.

Faculty of Humanities

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| Collaborating Institutions | Wollongong University, Universidade Federal de Minas Gerais, U Toronto, Mt. Allison U, Memorial University of Newfoundland, Masaryk University, Universite Paul Valery, Montpellier 3, University of Birmingham, Universität Konstanz, University of Szeged, University of the West Indies, University of Nis, Comenius University, Universidad de Huelva, University of Salamanca, University of La Rioja, University of Vigo, University of Debrecen |
| Researcher/Project Coordinator | Daniel Coleman, Investigator (dcoleman@mcmaster.ca) Lorraine York, Co-investigator (yorkl@mcmaster.ca) Rachel Harvey, Project Coordinator |

PROJECT CATEGORY: RESEARCH ENGLISH AND CULTURAL STUDIES

Eighteenth-Century Fiction

Since 1988, an international journal dedicated to eighteenth-century literature and culture; high in international journal rankings; long-standing SSHRC funding.

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| Collaborating Countries | Canada, USA, Great Britain, Belgium |
| Collaborating Institutions | McMaster U, UCLA, U Massachusetts Amherst, Western U, U Ottawa, U Windsor, RMC, Queen's U, Oxford U, U Alberta, Columbia U, U Rochester, Oregon State U, UBC, Vanderbilt U, UC Irvine, U Toronto, Syracuse U, U Montreal, U Penn, McGill U, Simon Fraser U, Duke U, U Libre de Bruxelles. |
| Researcher/Project Coordinator | Gena Zuroski Jenkins - zjenkin@mcmaster.ca Jacqueline Langille - ecf@mcmaster.ca Peter Walmsley - walmsley@mcmaster.ca |

DEPARTMENT OF HISTORY

PROJECT CATEGORY: EDUCATION HISTORY

Modern British History: A Text for the 21st Century

A brand new, authoritative textbook of British history (1688 to present) for use in universities and colleges in North America, to be published in 2014 by Routledge. Includes extensive website and other blended learning resources. Constructed and written over the past three years by a team of five mid-career scholars, vetted by two dozen peer reviewers, and with editorial assistance from Routledge.

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| Collaborating Countries | United States, Canada |
| Collaborating Institutions | Clemson University University of Nevada, Las Vegas University of Montana |
| Researcher/Project Coordinator | Stephen Heathorn - heaths@mcmaster.ca |

DEPARTMENT OF PHILOSOPHY

PROJECT CATEGORY: RESEARCH PHILOSOPHY

Workshop on "The Language of Nature: Re-Appraising the Mathematization of Natural Philosophy in the Seventeenth Century", at the Rotman Institute at Western University, London, October 2012.

The aim of the workshop project is to re-evaluate a prominent historiographical orientation of twentieth century research on the Scientific Revolution – the mathematization of nature (Koyré, Dijksterhuis, Burt) – in light of the proliferation of novel methodological orientations and studies in the last generation of scholars. By examining the relation between mathematical and scientific knowledge from a variety of perspectives, including philosophical, social, and rhetorical, the workshop and volume will shed new light on the complex gestation and nurture of modern science. The resulting papers are to be published as a volume in Minnesota Studies in Philosophy of Science.

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| Collaborating Countries | Canada, USA, Romania |
| Collaborating Institutions | Rotman Institute (Western University, Canada), Minnesota Center for Philosophy of Science (University of Minnesota), Macalester University, Winona State University, McGill University, University of Alberta, Princeton University, University of Bucharest, University of New Mexico, University of South Florida, McMaster University. |
| Researcher/Project Coordinator | Richard T. W. Arthur - rarthur@mcmaster.ca |

Faculty of Humanities

PROJECT CATEGORY: RESEARCH

PHILOSOPHY

Oltenia Colloquium in Early Modern Philosophy, 15 - 16 May 2013

The theme of the workshop: "Between Continuity and Transformation: Leibniz on Substance and Substantial Forms". This Colloquium explores Leibniz's theory of substance and substantial forms, especially in connection with the crucial moment 1678-1679. We want to see, both from an historical and systematic point of view, the continuity and the transformation of the young Leibniz's ideas (1666-1679) to the mature Leibniz (1680-1695). As a result of the exchange of views in the workshop, a volume of papers will be published by Springer Verlag as Leibniz's metaphysics: the adoption of substantial forms.

Collaborating Countries Romania, USA, Canada, Italy, Finland, Germany, UK

Collaborating Institutions University of Craiova, University of Bucharest, Princeton University, University of South Florida, Università di Torino, Universität Paderborn, University of Edinburgh, University of Helsinki, McMaster University

Researcher/Project Coordinator Richard T. W. Arthur - rarthur@mcmaster.ca

PROJECT CATEGORY: RESEARCH

PHILOSOPHY

Workshop on Spinoza and Leibniz, at U of T March 22-23

The aim of the workshop was to explore, and find the possible lines of influence between, the work of Baruch Spinoza and Gottfried Leibniz.

Collaborating Countries Canada, USA

Collaborating Institutions Harvard University (USA), University of California, San Diego (USA), McMaster University.

Researcher/Project Coordinator Richard T. W. Arthur - rarthur@mcmaster.ca

PROJECT CATEGORY: RESEARCH

PHILOSOPHY

Workshop on Finite Geometry, Indivisibles and Minima from the Middle Ages to the 18th Century at the Max Planck Institute for the History of Science, Berlin, May 29th 2013.

The aim of the workshop was to try to reconnect different theories of different ages, and find the possible lines of influence, for theories about the composition of the continuum from finite indivisibles; from the Middle Ages, through high Scholasticism, Giordano Bruno, and early modern atomism, to the work of Gottfried Leibniz and David Hume.

Collaborating Countries Germany, USA, Netherlands, Canada

Collaborating Institutions Max Planck Institute for the History of Science, Berlin (Germany), Radboud Universiteit (Nijmegen, Netherlands), Universität Kassel (Germany), University of South Florida (USA), McMaster University.

Researcher/Project Coordinator Richard T. W. Arthur - rarthur@mcmaster.ca

PROJECT CATEGORY: RESEARCH

PHILOSOPHY

Two seminars on Leibniz on the infinite and a research collaboration within the specialized seminar on Leibniz at the Scuola Normale Superiore, Pisa, centred on the reading of an unpublished dialogue of mine that had been circulated in advance

The understanding of the infinite in mathematics and philosophy, with special attention to the work of Gottfried Leibniz.

Collaborating Countries Italy

Collaborating Institutions Scuola Normale Superiore, Pisa, Università di Pisa, Università di Firenze

Researcher/Project Coordinator Richard T. W. Arthur - rarthur@mcmaster.ca

PROJECT CATEGORY: RESEARCH

PHILOSOPHY

Language, Thought and Logic in the Twentieth Century and Beyond

As a specialty, the history of analytical philosophy is one of the fastest growing. While research centres in philosophy have multiplied in the course of the last few decades, none so far has been dedicated to study in the field. The objective of "Language, Thought and Logic in the 20th Century and Beyond" to create a multi-institutional point of gravity for research and training in the history of analytical philosophy. The partnership will seek to federate research in the history of analytical philosophy and concentrate resources. It will support the creation of an exceptional research milieu by capitalizing on the fruitful interplay of historical and philosophical reflection. It will bring together institutions whose recognized strength complement each other in order to generate a multidimensional research and training environment, the first of its kind, and build knowledge from a cross-sector perspective. The project will involve 6 institutional partners, each of whom will contribute a different set of resources to the partnership: McMaster University (Hamilton, CAN), the University of Latvia (Riga, LV), Northwestern University (Evanston, USA), York University (Toronto, CAN), the University of British Columbia (Vancouver, CAN) and the University of Illinois at Urbana-Champaign (Urbana, USA). Our approach is based on the idea that the best way to stimulate an area of research is to federate preexisting networks of expertise in the area. Our method consists in soliciting the

Faculty of Humanities

participations of specialists with vast connections in the field to organize/direct various events. The collaborators' contribution is twofold. On the one hand, they directly contribute expertise to research and training activities. On the other hand, the collaborators "lend their networks" to the project. Our collaborators are asked to assemble a team of highly recognized experts on a given topic and thus form the basis for a specific activity. The project will count on the participation of thirty-five individual collaborators and will directly engage the participation of hundreds of experts and students in its activities. With the world-renowned Russell Archives and the Bertrand Russell Research Centre at McMaster University and the Center for Cognitive Sciences and Semantics at the University of Latvia, the partners have the traction and the infrastructure to be at the forefront of research and training in the field. The partnership will put Canada at the leading edge of training and research in the history of analytical philosophy. It will create a unique venture mobilizing exceptional resources from the best philosophy departments in the world. The result will be unequivocal: the partnership will create a cohesive, synergetic scientific milieu attracting the participation of hundreds of students and renowned experts every year. It will turn the Bertrand Russell Research Centre and the Center for Cognitive Sciences and Semantics into a multiparty scientific hub whose visibility will reflect on all the partners and collaborators.

Collaborating Countries USA, Latvia

Collaborating Institutions University of Latvia (see Memorandum of Understanding), Northwestern University, York University, University of Illinois at Urbana-Champaign, University of British Columbia.

Researcher/Project Coordinator Sandra Lapointe - lapointe@mcmaster.ca

PROJECT CATEGORY: RESEARCH/EDUCATION
PHILOSOPHY

3rd International Summer School in Cognitive Sciences and Semantics (ISSCSS) : Theories of Communication

The third edition of ISSCSS gathered some 30 faculty and graduate students from Canada, the USA and Europe. It lasted 10 days and constituted the equivalent of a 3 unit course at the graduate level. It was one of the most important international events in the field of philosophy in 2011. David Lewis's groundbreaking work has set the agenda in wide areas of philosophical literature on language and mind since the late 1960s. As a philosopher, he developed the idea that 'folk' psychological theory, duly ramsified, fixes the referent of a psychological concept on a physical property; that folk theory links intentional vocabulary to the rational explanation of behavior and that natural language meaning is based in intentional psychology via a convention of truth and trustfulness. On the technical side, we find early or initial treatments of the intentional theory of perception; a compositional intensional semantics for a significant fragment of natural language; foundations for Bayesian epistemology and causal decision theory; the supervaluational approach to vagueness; an intensional semantics for the subjunctive conditional; an intensional treatment of the definite description; the canonical picture of ordinary language quantification; and the semantic influence of context.

Collaborating Countries Canada, USA, United Kingdom, Latvia

Collaborating Institutions McMaster University, University of Latvia (see Memorandum of Understanding)

Researcher/Project Coordinator Sandra Lapointe - lapointe@mcmaster.ca

PROJECT CATEGORY: RESEARCH/EDUCATION
PHILOSOPHY

4th International Summer School in Cognitive Sciences and Semantics (ISSCSS) : Theories of Communication

The fourth edition of ISSCSS gathered some 40 faculty and graduate students from Canada, the USA and Europe. It lasted 10 days and constituted the equivalent of a 3 unit course at the graduate level. It was one of the most important international events in the field of philosophy in 2012. It was devoted to answering a number of questions in the philosophy of language and theory of communication. They include the following: What linguistic knowledge and interpretive mechanisms are required to explain the phenomena of inferential communication? Should we favour an explanation rooted in Relevance Theory? And what insight can a pragmatic approach give us into the evolution of human communication? These and other questions will be the focus of the 2012 edition of the International Summer School in Cognitive Sciences and Semantics. Among the topics explored will be the following: (i) information structure, (ii) temporal reference, (iii) indirect speech acts, (iv) non-literal uses of language, in particular, metaphor and related tropes, including hyperbole, simile, sarcasm and irony, (v) hinting, (vi) the nature of word meaning, (vii) cooperation and antagonism in conversation, (viii) slurs, and (ix) the idea of a dynamic lexicon.

Collaborating Countries USA, United Kingdom, France, Latvia

Collaborating Institutions University of Latvia (see Memorandum of Understanding)

Researcher/Project Coordinator Sandra Lapointe - lapointe@mcmaster.ca

Faculty of Humanities

PROJECT CATEGORY: RESEARCH/EDUCATION
PHILOSOPHY

5th International Summer School in Cognitive Sciences and Semantics (ISSCSS) : Perception

The fifth edition of ISSCSS will gather some 40 faculty and graduate students from Canada, the USA and Europe. It will last 10 days and constitute the equivalent of a 3 credit unit course at the graduate level. It is one of the most important international events in the field of philosophy this summer. It will be devoted to answering a number of questions in the philosophy of perception. They include the following: What features should we consider when giving an account of the different senses and can we map how the senses are related to each other? What kind of cross-modal experiences are there and could there be? What is the relationship between perceptual illusion, hallucination, perception and synaesthesia? What is the distinction between mental imagery and perceptual experience? What kinds of synaesthetic associations are there? Is perception unified or are the modalities primary? What is the perceptual status of space and time? Is the phenomenology of perceptual experience modally specific?

Collaborating Countries USA, United Kingdom, Latvia

Collaborating Institutions University of Latvia (see Memorandum of Understanding)

Researcher/Project Coordinator Sandra Lapointe - lapointe@mcmaster.ca

Faculty of Science



DEPARTMENT OF BIOLOGY

PROJECT CATEGORY: RESEARCH
BIOLOGY

Evolution of muscle metabolism during exercise in mice selected for high locomotor activity.

Assessing the changes in exercise metabolism in mice selected over multiple generations for high locomotor activity.

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| Collaborating Countries | USA |
| Collaborating Institutions | University of California, Riverside |
| Researcher/Project Coordinator | Grant McClelland - grantm@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
BIOLOGY

Metabolic adaptation to high altitude in Andean mice

A multispecies comparative study of the metabolic adaptations to high altitude in Andean leaf-eared mice..

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| Collaborating Countries | Peru, USA |
| Collaborating Institutions | Universidad Peruana Cayetano Heredia |
| Researcher/Project Coordinator | Grant McClelland - grantm@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
BIOLOGY

Metabolic adaptations to high altitude in deer mice

Intraspecific developmental and physiological plasticity of muscle metabolism to cold and hypoxia at high altitude deer mice..

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| Collaborating Countries | USA |
| Collaborating Institutions | University of Nebraska University of Illinois |
| Collaborative Team work | Storz, Jay, U Nebraska Cheviron, Zac, U Illinois |
| Researcher/Project Coordinator | Grant McClelland - grantm@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
BIOLOGY

Identification of Unique Triple Negative Breast Cancer (TNBC) Biomarkers in Women of African Ancestry (WAA).

Our project seeks to identify unique biomarkers or mutations that may explain the racial disparity in the prevalence of the aggressive triple negative breast cancer subtype, TNBC, in young pre-menopausal women of African ancestry (WAA) compared to other races. We postulate that the high TNBC prevalence in WAA may be linked to an ancestral genetic predisposition. Thus we are studying TNBC in a more homogeneous population of shared African ancestry (Barbados) with similar lifestyles but with less genetic mixing than North American WAA. We will analyze TNBC tissues from Barbadian WAA (BWAA) and West African women (Nigeria) to identify TNBC-specific biomarkers or mutations that can be used to diagnose or develop therapies for TNBC patients worldwide.

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| Collaborating Countries | Barbados, Nigeria and USA |
| Collaborating Institutions | Barbados - University of the West Indies (Cavehill) and Queen Elizabeth Hospital Nigeria – National Hospital (Abuja) and University of Nigeria (Enugu) USA - Yale University School of Medicine |
| Researcher/Project Coordinator | Juliet M. Daniel - danielj@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
BIOLOGY

Contributions of cell adhesion complex proteins to triple negative breast cancers

This project seeks to elucidate how malfunction of the E-cadherin-catenin cell adhesion complex contributes to invasive breast tumorigenesis. Various cohorts of invasive breast cancer tumor tissues will be analyzed for the expression of cadherins and catenins and this will be correlated with tumor stage and grade..

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| Collaborating Countries | The Netherlands |
| Collaborating Institutions | UMC Utrecht |
| Researcher/Project Coordinator | Juliet M. Daniel - danielj@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
BIOLOGY

Role of POZ-ZF proteins in vertebrate development and signal transduction.

Our project seeks to understand the role of the POZ-zinc finger (POZ-ZF) family of Transcription Factors in Vertebrate Development. POZ-ZF proteins are implicated as important regulators in development and cancer, and most POZ-ZF proteins mediate their effects by down-regulation (repression) of their target genes. Using the frog *Xenopus laevis* as a model vertebrate organism, we will perform knock-down and overexpression experiments to characterize POZ-ZF protein function in vertebrate development. We will also perform gene expression studies to identify *bona fide* target genes of the studied POZ-ZF transcription factors. The proposed studies will provide novel insight on the relevance of POZ-ZF transcription factors in vertebrate development as a whole.

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| Collaborating Countries | Canada, USA |
| Collaborating Institutions | Canada – University of Waterloo USA – University of Texas MD Anderson Cancer Center (Houston) |
| Researcher/Project Coordinator | Juliet M. Daniel - danielj@mcmaster.ca |

DEPARTMENT OF CHEMISTRY & CHEMICAL BIOLOGY

PROJECT CATEGORY: RESEARCH
CHEMISTRY & CHEMICAL BIOLOGY

Xenon(II) Oxide Fluorides

The collaboration focussed on the oxide fluoride chemistry of Xe(II), producing the first example of a Xe(II)-O bonded species. This work has led to several other significant developments in Xe(II)-O chemistry in our laboratory at McMaster and several papers in the high-impact journal, the *Journal of the American Chemical Society*.

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| Collaborating Countries | USA |
| Collaborating Institutions | University of Southern California, Los Angeles |
| Researcher/Project Coordinator | Gary J. Schrobilgen - schrobil@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
CHEMISTRY & CHEMICAL BIOLOGY

Xenon-Carbon Bonded Cations

A joint research project aimed at extending the range of species in which xenon is bonded to carbon. The primary emphasis is on the stabilization of new xenon-carbon bonded species and the use of weakly coordinating anions to stabilize xenon(II)-carbon and xenon(IV)-carbon bonded cations.

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| Collaborating Countries | Germany |
| Collaborating Institutions | Duisburg-Essen Universität, Germany |
| Researcher/Project Coordinator | Gary J. Schrobilgen - schrobil@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
CHEMISTRY & CHEMICAL BIOLOGY

Attaining the Highest Oxidation States of the Heavy Metals

The goal of the collaboration was to extend the range of examples of transition metal compounds (fluorides and oxide fluorides) in their highest attainable oxidation states. The studies were mainly aimed at the heavy transition metals such as iridium(VII) and mercury(IV). Our efforts were directed to looking for examples of the unknown Ir(VII) oxidation state. The +VII oxidation state of iridium was achieved as IrF_6^+ .

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| Collaborating Countries | Germany |
| Collaborating Institutions | Albert-Ludwigs Universität, Freiburg, Germany |
| Researcher/Project Coordinator | Gary J. Schrobilgen - schrobil@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
CHEMISTRY & CHEMICAL BIOLOGY

XeF₂ and KrF₂ Coordination to a Main Group Center; Raman Spectra (n = 1, 2) and X-ray Crystal Structures (n = 1) of [BrOF₂][AsF₆]_nXeF₂ and [XOF₂][AsF₆] (X = Cl, Br).

This collaboration dealt with theoretical aspects using electron localization functions (ELF) to study the ligating behaviors of KrF₂ and XeF₂ towards BrOF⁺. Two papers describing the synthesis, structure and bonding in [BrOF₂][AsF₆]₂KrF₂ and [BrOF₂][AsF₆]₂XeF₂ appear in the *Journal of the American Chemical Society* and *Inorganic Chemistry*, respectively.

Collaborating Countries France

Collaborating Institutions Albert-Ludwigs Universität, Freiburg, Germany

Researcher/Project Coordinator Gary J. Schrobilgen - schrobil@mcmaster.ca

PROJECT CATEGORY: RESEARCH
CHEMISTRY & CHEMICAL BIOLOGY

NMR Spectroscopic Evidence for the Intermediacy of XeF₃⁻ in XeF₂/F⁻ Exchange, Attempted Syntheses and Thermochemistry of XeF₃⁻ Salts, and Theoretical Studies of the XeF₃⁻ Anion in the Gas Phase and in Solution

Theoretical aspects of the stability and geometry of the XeF₃⁻ anion were studied. This anion is an intermediate in the exchange of ¹⁸F⁻ with XeF₂ that allows labelling of the XeF₂ for electrophilic radiofluorinations of biologically interesting molecules for PET imaging. ELF (electron localization) calculations were used to investigate the stereochemical activities of the valence electron lone pairs of xenon in this anion.

Collaborating Countries Finland

Collaborating Institutions Department of Chemistry University of Jyväskylä Finland

Researcher/Project Coordinator Gary J. Schrobilgen - schrobil@mcmaster.ca

PROJECT CATEGORY: RESEARCH
CHEMISTRY & CHEMICAL BIOLOGY

Proprietary

Project deals with aspects of the uranium fuel re-enrichment cycle. Details are proprietary

Collaborating Countries France

Collaborating Institutions Areva-Comurhex
Pierrelatte
France

Researcher/Project Coordinator Gary J. Schrobilgen - schrobil@mcmaster.ca

PROJECT CATEGORY: RESEARCH
CHEMISTRY & CHEMICAL BIOLOGY

Poly[perfluorotitanate(IV)] anions of the Imidazolium Cation

Complex poly[perfluorotitanate(IV)] compounds are of interest because they are used as stereo-selective catalysts in organic synthesis and in reactions leading to olefin polymerization. Reactions of imidazole and TiF₄ in varying molar ratios in HF solvent have afforded the X-ray structures of five new fluorotitanate salts of the imidazolium cation, ImH⁺. The poly[perfluorotitanate(IV)] anions have been characterized by X-ray crystallography, Raman spectroscopy and quantum-chemical calculations. This work is in press and will be published in *Inorganic Chemistry*.

Collaborating Countries Slovenia

Collaborating Institutions Department of Inorganic Chemistry and Technology
Jožef Stefan Institute Ljubljana
Slovenia

Researcher/Project Coordinator Gary J. Schrobilgen - schrobil@mcmaster.ca

PROJECT CATEGORY: RESEARCH
CHEMISTRY & CHEMICAL BIOLOGY

Syntheses of the first examples of KrF_2 coordinated to metal centers.

For the first time, this project examines the ligand properties of the one of the strongest oxidants known, KrF_2 , towards metal cation centers. This study has already resulted in the synthesis and X-ray crystallographic characterization of a KrF_2 complex with the Mg^{2+} cation.

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| Collaborating Countries | Slovenia |
| Collaborating Institutions | Department of Inorganic Chemistry and Technology Jožef Stefan Institute Ljubljana Slovenia |
| Researcher/Project Coordinator | Gary J. Schrobilgen - schrobil@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
CHEMISTRY & CHEMICAL BIOLOGY

Matrix-Isolation Studies in F_2 Matrices

The goal of the collaboration is to attempt the syntheses of fluorides and oxide fluorides of the main-group and transition metals that have defied synthesis and characterization under ordinary low-temperature conditions in solvents (ca. $-150\text{ }^\circ\text{C}$ to $-20\text{ }^\circ\text{C}$). This approach could, for example, extend the range of known examples of the transition metal compounds (fluorides and oxide fluorides) in their highest attainable oxidation states and the very limited chemistry of krypton.

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| Collaborating Countries | Germany |
| Collaborating Institutions | Albert-Ludwigs Universität, Freiburg, Germany |
| Researcher/Project Coordinator | Gary J. Schrobilgen - schrobil@mcmaster.ca |

DEPARTMENT OF GEOGRAPHY & EARTH SCIENCES

PROJECT CATEGORY: RESEARCH
GEOGRAPHY & EARTH SCIENCES

The Suburban Land Question: A Global Issue

In October, 2012, Montpellier was the site of an international workshop on the subject of suburban land. This was supported in part by a SSHRC Connections grant (Richard Harris, PI, based at McMaster) in part by a SSHRC MCRI grant (Roger Keil, PI, based at York), and in part by the University of Montpellier (Emmanuel Negrier, local organiser)

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| Collaborating Countries | France |
| Collaborating Institutions | York University, Canada University of Montpellier, Montpellier, France |
| Researcher/Project Coordinator | Richard Harris - harris@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
GEOGRAPHY & EARTH SCIENCES

Global Suburbanisms – Land

Comparative research on ‘informal’ methods of suburban development in Johannesburg, New Delhi and Bangalore. This is being coordinated by Richard Harris, co-PI on a SSHRC MCRI project on Global Suburbanisms (Roger Keil, PI, York University).

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| Collaborating Countries | South Africa, India |
| Collaborating Institutions | University of Johannesburg University of Bangalore |
| Researcher/Project Coordinator | Richard Harris - harris@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
GEOGRAPHY & EARTH SCIENCES

Placing People in Order to Govern Colonial Cities. Bombay and Calcutta, 1891-1912.

Comparative research on the social geography of Bombay and Calcutta in 1901, using published census data and archival records.

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| Collaborating Countries | India, United Kingdom |
| Collaborating Institutions | Zakir Husain Evening College, New Delhi University of Nottingham, UK University of Leicester, UK |
| Researcher/Project Coordinator | Richard Harris - harris@mcmaster.ca |

DEPARTMENT OF KINESIOLOGY

PROJECT CATEGORY: RESEARCH
KINESIOLOGY

META-PREDICT: Developing predictors of the health benefits of exercise for individuals

To identify molecular biomarkers for response to exercise training, so that individualised life style strategies can be developed to fight or prevent metabolic diseases such as obesity, diabetes and cardiovascular disease.

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| Collaborating Countries | Denmark, Finland, Spain, Sweden, UK, USA |
| Collaborating Institutions | Duke University, Karolinska Institute, Loughborough University, Medical Prognosis Institute, Pennington Biomedical Research Centre, University of Bath, University of Copenhagen, University of Jyvaskyla, University of London, University of Nottingham |
| Researcher/Project Coordinator | Martin Gibala - gibalam@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
KINESIOLOGY

Optimizing protein intake to anabolism in athletes and older persons

Research collaboration: Using protein to manipulate muscle growth in young and older persons

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| Collaborating Countries | Australia |
| Collaborating Institutions | Royal Melbourne Institute of Technology |
| Researcher/Project Coordinator | Stuart Phillips - phillis@mcmaster.ca |

DEPARTMENT OF MATHEMATICS & STATISTICS

PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

Vortex structures in Ginzburg-Landau systems

We study the systems of partial differential equations which govern certain spin-coupled superconducting systems and Bose-Einstein condensates. We describe the structure of the vortices, which are quantized singularities in superfluid materials. We produced three research papers in international journals, and presented the results in various international mathematics conferences.

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| Collaborating Countries | France |
| Collaborating Institutions | Université de Lyon I |
| Researcher/Project Coordinator | Stan Alama - alama@mcmaster.ca Lia Bronsard - bronsard@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

Vortices in the Lawrence-Doniach model of superconductivity

A study of the lower critical field and the shape of vortex lattices in highly anisotropic superconductors, including the high-temperature superconducting materials. We produced four research papers in international journals, and presented the results in various international mathematics conferences.

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| Collaborating Countries | France |
| Collaborating Institutions | Université Paris-Est/Marne la Vallée |
| Researcher/Project Coordinator | Stan Alama - alama@mcmaster.ca Lia Bronsard - bronsard@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

Quasiminimal structures and excellence

A resolution of the issue of the axioms for quasi-minimal categorical structures.

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| Collaborating Countries | Finland, United Kingdom |
| Collaborating Institutions | University of Helsinki University of East Anglia |
| Researcher/Project Coordinator | Bradd Hart - hartb@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

The fine structure of the spectrum of countable theories

This project, growing out of the successful resolution of the spectrum problem for countable theories attempts to provide a fine structure theorem for the necessary structural components in the proof.

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| Collaborating Countries | France, Israel, USA |
| Collaborating Institutions | CNRS, Universite Paris Sud Hebrew University, Jerusalem University of Maryland |
| Researcher/Project Coordinator | Bradd Hart - hartb@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

Model theory and the classification problem for nuclear C^* -algebras

The goal of the project is to determine the extent that model theory can aid in the classification problem for nuclear C^* -algebras. The undergraduate research teams are part of a Fields-MITACS grant which has provided funds for the research during July-August for the past three years.

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| Collaborating Countries | Germany, United States |
| Collaborating Institutions | University Muenster Purdue Fields Institute |
| Researcher/Project Coordinator | Bradd Hart - hartb@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

Model theory of operator algebras

A model theoretic investigation of operator algebras with particular focus on II_1 factors including a resolution of the McDuff conjecture.

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| Collaborating Countries | USA |
| Collaborating Institutions | University of Illinois, Chicago University of Illinois, Urbana-Champaign University of Virginia |
| Researcher/Project Coordinator | Bradd Hart - hartb@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

Casson $SU(3)$ invariant via gauge theory

A study of invariants of 3-manifolds defined in terms of moduli spaces of flat $SU(3)$ connections. Specific problems studied include defining a Casson $SU(3)$ invariant for rational homology 3-spheres, and computing the Casson $SU(3)$ invariant for spliced sums. These results were disseminated internationally through invited talks and publications.

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| Collaborating Countries | USA, Denmark, Germany |
| Collaborating Institutions | University of Nevada, Reno Aarhus Univeristy Max Planck Institute for Mathematics, Bonn |
| Researcher/Project Coordinator | Hans U. Boden - boden@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

The $SL(2, \mathbb{C})$ Casson invariant and the A-polynomial

A study of invariants of 3-manifolds and knots defined in terms of the $SL(2, \mathbb{C})$ character varieties. Specific problems studied include computing the $SL(2, \mathbb{C})$ Casson invariant for surgeries on two-bridge knots and relating the corresponding knot invariant to the A-polynomial. These results were disseminated internationally through invited talks and publications.

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| Collaborating Countries | USA, Germany |
| Collaborating Institutions | The College of New Jersey Max Planck Institute for Mathematics, Bonn |
| Researcher/Project Coordinator | Hans U. Boden - boden@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

Metabelian representations of knot groups

We proved a classification theorem for metabelian $SL(n, \mathbb{C})$ representations of knot groups and related the number of irreducible metabelian representations in terms of the order of the first homology of the n -fold branched covers. We also gave an interpretation of metabelian representations in terms of fixed points of a natural action of the cyclic group \mathbb{Z}/n , and established strong existence and deformation results. We applied these results to answer of M. Wada and several conjectures of Hirasawa – Murasugi about twisted Alexander polynomials. These results were disseminated internationally through invited talks and publications.

Collaborating Countries Germany

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| Collaborating Institutions | Mathematisches Institut, Universität zu Köln |
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| Researcher/Project Coordinator | Hans U. Boden - boden@mcmaster.ca |
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PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

Towards a Partnership for Computational Optimization of Multiphysics Systems

The goal of the project was collaborative development of mathematical and computational methods for modeling and optimization of complex multiphysics systems. It was motivated by some fundamental research problems arising in a collaborative project with an industrial partner (General Motors).

This initiative was funded during 2008-2009 with a travel grant from the Department of Foreign Affairs and International Trade Canada (program "Going Global Fund").

Collaborating Countries Australia

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| Collaborating Institutions | The Commonwealth Scientific and Industrial Research Organisation (CSIRO) |
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| Researcher/Project Coordinator | Bartosz Protas - bprotas@mcmaster.ca |
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PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

Research on Problems in Theoretical Fluid Mechanics

Dr. Protas was invited for the periods of 4-6 weeks to conduct collaborative research with faculty at the host institutions

Collaborating Countries France

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| Collaborating Institutions | Universite Bordeaux I (2009) Universite de Poitiers (2012) Universite de Rouen (2013) |
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| Researcher/Project Coordinator | Bartosz Protas - bprotas@mcmaster.ca |
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PROJECT CATEGORY: RESEARCH AND EDUCATION
MATHEMATICS & STATISTICS

Model Theory of Valued Fields

Project to write a graduate textbook.

Collaborating Countries Canada, France

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| Collaborating Institutions | McMaster University CNRS- Centre national de la recherche scientifique (French National Centre for Scientific Research) |
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| Researcher/Project Coordinator | Deirdre Haskell - Haskell@math.mcmaster.ca |
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PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

Imaginary in Valued Fields

An on-going research project.

Collaborating Countries Canada, Israel, UK

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| Collaborating Institutions | McMaster University Hebrew University University of Leeds |
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| Researcher/Project Coordinator | Deirdre Haskell - Haskell@math.mcmaster.ca |
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PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

Residue Field Domination in Ordered Fields with a Convex Valuation

An on-going research project.

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| Collaborating Countries | USA |
| Collaborating Institutions | University of Western Illinois |
| Researcher/Project Coordinator | Deirdre Haskell - Haskell@math.mcmaster.ca |

PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

Statistical sampling to estimate VC density

An on-going research project.

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| Collaborating Countries | Canada, USA |
| Collaborating Institutions | McMaster University Haverford College |
| Researcher/Project Coordinator | Deirdre Haskell - Haskell@math.mcmaster.ca |

PROJECT CATEGORY: GLOBAL PARTNERSHIP/RESEARCH
MATHEMATICS & STATISTICS

Development of a Wolsong Units 2, 3, and 4 Best-Estimate with Uncertainty Pressure Tube Diametral Creep Model

Methodology for Regional Overpower Protection Analysis with HTS Aging

This project involves the development of an EVS-based uncertainty analysis for setting ROP trip setpoints for South Korean reactors at Wolsong Generating Station. The methodology involves extreme value statistics and the separation of epistemic and aleatory error to determine tolerance intervals for a lower percentile of a trip setpoint distribution. The analysis requires formulation of an appropriate error model for pressure tube creep needed for some of the inputs to EVS.

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| Collaborating Countries | South Korea |
| Collaborating Institutions | AMEC-NSS Korea Hydro & Nuclear Power Nuclear Engineering & Technology Institute Korea Advanced Institute of Science and Technology Korea Electric Power Research Korea Nuclear Fuel Chosun University |
| Researcher/Project Coordinator | Fred M. Hoppe - hoppe@mcmaster.ca |

PROJECT CATEGORY: RESEARCH/EDUCATION
MATHEMATICS & STATISTICS

Transition from Secondary to Tertiary Mathematics Teaching and Learning

After finishing a theoretical model for the transition (based on the anthropological notion of the rite of passage) which establishes the framework, we have been studying particular aspects of the transition in mathematics. The findings (so far) have been presented at several conferences, and were published in international math education journals.

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| Collaborating Countries | New Zealand |
| Collaborating Institutions | Victoria University, Auckland Institute of Technology (AUT) |
| Researcher/Project Coordinator | Miroslav Lovric - lovric@mcmaster.ca |

Faculty of Science

PROJECT CATEGORY: RESEARCH
MATHEMATICS & STATISTICS

Ricci Solitons of Cohomogeneity One

The object is to study properties of gradient Ricci solitons and to establish existence of such solitons theoretically and, failing that, numerically.

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| Collaborating Countries | UK |
| Collaborating Institutions | Oxford University |
| Researcher/Project Coordinator | McKenzie Y. Wang - wang@mcmaster.ca |

DEPARTMENT OF MEDICAL PHYSICS & APPLIED RADIATION SCIENCES

PROJECT CATEGORY: EDUCATION
MEDICAL PHYSICS & APPLIED RADIATION SCIENCES

MSc Programme in Nuclear Science

Review of existing INST MSc programme as external examiners

Visit to help establish neutron activation analysis facility at INST (sponsored by International Atomic Energy Agency)

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| Collaborating Countries | Kenya |
| Collaborating Institutions | Institute of Nuclear Science & Technology (INST), University of Nairobi |
| Researcher/Project Coordinator | David R. Chettle - chettle@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
MEDICAL PHYSICS & APPLIED RADIATION SCIENCES

Measurements of Pb in bone of living subjects

Loan of McMaster equipment, collaboration on analysis and interpretation of results. Joint authorship on publications.

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| Collaborating Countries | China |
| Collaborating Institutions | National Research Center of Geoanalysis, Beijing |
| Researcher/Project Coordinator | David R. Chettle - chettle@mcmaster.ca |

PROJECT CATEGORY: EDUCATION
MEDICAL PHYSICS & APPLIED RADIATION SCIENCES

Development of Medical Physics education at the University of the West Indies (UWI), Jamaica

Mitko Voutchkov of UWI Jamaica will visit McMaster briefly in July 2013, sponsored by International Atomic Energy Agency.

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| Collaborating Countries | Jamaica |
| Collaborating Institutions | University of the West Indies, Jamaica |
| Researcher/Project Coordinator | David R. Chettle - chettle@mcmaster.ca |

DEPARTMENT OF PHYSICS & ASTRONOMY

PROJECT CATEGORY: RESEARCH
PHYSICS & ASTRONOMY

Polymer rheology on the nano-scale

Polymer physics, nano-science, experiments and theory.

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| Collaborating Countries | Germany |
| Collaborating Institutions | Saarland University |
| Researcher/Project Coordinator | Kari Dalnoki-Veress - dalnoki@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PHYSICS & ASTRONOMY

Diblock copolymers in thin films

Polymer physics, nano-science, experiments and theory.

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| Collaborating Countries | UK |
| Collaborating Institutions | University of Reading |
| Researcher/Project Coordinator | Kari Dalnoki-Veress - dalnoki@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PHYSICS & ASTRONOMY

Nano-rheology of thin films

Polymer physics, nano-science, experiments and theory.

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| Collaborating Countries | France |
| Collaborating Institutions | ESPCI, Paris, France |
| Researcher/Project Coordinator | Kari Dalnoki-Veress - dalnoki@mcmaster.ca |

DEPARTMENT OF PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Cognitive control: The role of memory for previous experiences

Dr. Juan Lupianez of the Universidad de Granada and I have an ongoing research collaboration that dates back to 1995. Many of his students have spent time in my lab, and my students and I have visited his lab regularly.

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| Collaborating Countries | Spain |
| Collaborating Institutions | Universidad de Granada, Granada-Spain |
| Researcher/Project Coordinator | Bruce Milliken - millike@mcmaster.ca |

PROJECT CATEGORY: RESEARCH/EDUCATION
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Voice features, body size, and attractiveness in a Cuban sample

This project is a cross-cultural investigation of voice features, body size, and attractiveness. It is the first Cuban sample ever studied.

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| Collaborating Countries | Cuba |
| Collaborating Institutions | Havana University |
| Researcher/Project Coordinator | David Feinberg - feinberg@mcmaster.ca |

PROJECT CATEGORY: RESEARCH/EDUCATION
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Vocal and facial attractiveness

An international collaboration between four labs. Here we share ideas, software, facilities, and stimuli and help train each other's students in areas that we are best experts at. This collaboration is highly successful and has yielded dozens of publications in high profile journals.

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| Collaborating Countries | Scotland, UK; Whales, UK |
| Collaborating Institutions | Glasgow University, St Andrews University, University of Aberswyth |
| Researcher/Project Coordinator | David Feinberg - feinberg@mcmaster.ca |

PROJECT CATEGORY: RESEARCH/EDUCATION
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Semen quality and vocal attractiveness

This project is an investigation into whether voice features predict semen quality.

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| Collaborating Countries | United States of America |
| Collaborating Institutions | Oakland University |
| Researcher/Project Coordinator | David Feinberg - feinberg@mcmaster.ca |

PROJECT CATEGORY: RESEARCH/EDUCATION
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Sociolinguistics, socioeconomic status, and vocal attractiveness

This project is an investigation of how sociolinguistic vocal features interact with extralinguistic vocal features to influence attractiveness. We are also investigating the influence of socioeconomic status on the aforementioned variables.

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| Collaborating Countries | USA |
| Collaborating Institutions | Massachusetts Institute for Technology |
| Researcher/Project Coordinator | David Feinberg - feinberg@mcmaster.ca |

PROJECT CATEGORY: RESEARCH/EDUCATION
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Meta-analysis of voice quality and body size

This project is a meta-analysis of existing literature and new samples from collaborative institutions on the relationship between voice quality and body size

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| Collaborating Countries | Scotland, UK, Germany |
| Collaborating Institutions | Glasgow University (UK), University of Göttingen (Germany) |
| Researcher/Project Coordinator | David Feinberg - feinberg@mcmaster.ca Paul Andrews - pandrews@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Drug discovery for visual disorders

The project involves a series of research studies including development of a new sensitive vision test for age-related macular degeneration, development of additional vision markers of early stage visual disease, quantifying changes in the brain caused by visual disease, and a pre-clinical model of drug induced improved of vision.

The projects involves my team at McMaster, 4 teams at Allergan inc in the biological science division, and a local start-up company Pairwise affinity.

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| Collaborating Countries | USA |
| Collaborating Institutions | Allergan inc, Pairwise affinity inc |
| Researcher/Project Coordinator | Kathryn Murphy - kmurphy@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Neuromagnetic imaging of Residual Inhibition of tinnitus

Magnetoencephalography (MEG) will be used to measure how neural activity in primary auditory cortex is modified by masking sounds that induce a brief suppression of tinnitus (called "Residual Inhibition" in the tinnitus literature).

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| Collaborating Countries | Germany |
| Collaborating Institutions | University of Muenster |
| Researcher/Project Coordinator | Larry E. Roberts - roberts@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Evaluation of sound therapies for tinnitus and hyperacusis

Three sound therapy protocols engineered to induce a lasting tinnitus suppression will be tested for efficacy in tinnitus patients at the National Center for Rehabilitative Auditory Research (NCRAR) in Portland, Oregon.

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| Collaborating Countries | U.S.A., New Zealand, United Kingdom |
| Collaborating Institutions | Oregon Health and Science University, Portland University of Nottingham, U.K. University of Auckland , N.Z. |
| Researcher/Project Coordinator | Larry E. Roberts - roberts@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Neuromodulation of neural plasticity in tinnitus

We are testing some hypotheses regarding the role of neuromodulators and neural plasticity in tinnitus, in an animal model.

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| Collaborating Countries | USA |
| Collaborating Institutions | University of Michigan, Ann Arbor |
| Researcher/Project Coordinator | Larry E. Roberts - roberts@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

The use of music as a marker of human migrations

Comparative analysis of music, genes, and languages in the study of human migrations occurring during the Pacific region over the last 6,000 years.

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| Collaborating Countries | Japan |
| Collaborating Institutions | Tokyo University of the Arts |
| Researcher/Project Coordinator | Steven Brown - stebro@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Analysis of the arcuate fasciculus of the human brain

Use of diffusion tensor MRI imaging to examine a major fiber bundle (the arcuate fasciculus) in the human brain.

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| Collaborating Countries | Germany |
| Collaborating Institutions | Max Planck Institute for Cognitive and Brain Sciences |
| Researcher/Project Coordinator | Steven Brown - stebro@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

The use of music as a marker of human migrations

Comparative analysis of music, genes, and languages in the study of human migrations occurring during the Pacific region over the last 6,000 years.

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| Collaborating Countries | Germany |
| Collaborating Institutions | Max Planck Institute for Evolutionary Anthropology |
| Researcher/Project Coordinator | Steven Brown - stebro@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

The use of music as a marker of human migrations

Comparative analysis of music, genes, and languages in the study of human migrations occurring during the Pacific region over the last 6,000 years.

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| Collaborating Countries | Taiwan |
| Collaborating Institutions | Mackay Memorial Hospital Molecular Anthropology and Transfusion Medicine Research Laboratory |
| Researcher/Project Coordinator | Steven Brown - stebro@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Aging and audio-visual and multi-cue integration

Examined the effects of aging on the ability to integrate auditory and visual information into a coherent percept of a multi-modal event.

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| Collaborating Countries | Ireland, USA |
| Collaborating Institutions | Institute of Neuroscience, Trinity College, Dublin, Ireland Volen Center for Complex Systems, Brandeis University, US |
| Researcher/Project Coordinator | Patrick Bennett - bennett@mcmaster.ca Allison Sekuler - sekuler@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Inhibition of target detection in apparent motion trajectory

This project examined the psychological characteristics of apparent (i.e., illusory) motion. In particular, it examined whether illusory motion interferes with the visibility of objects that are located on the trajectory of the illusory motion.

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| Collaborating Countries | Japan |
| Collaborating Institutions | Department of Psychology, Rikkyo University, Japan National Institute of Advanced Science & Technology, Japan Department of Psychology, Tohoku University, Japan |
| Researcher/Project Coordinator | Patrick Bennett - bennett@mcmaster.ca Allison Sekuler - sekuler@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Characteristics of perceptual learning

This project examines the properties of perceptual learning, which refers to the effects of practice on visual performance in detection, discrimination, and identification tasks. Perceptual learning has been used to investigate the properties of neural plasticity in adult brains, and has contributed to new approaches to minimizing the effects of stroke, aging, and neural disorders such as amblyopia.

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| Collaborating Countries | UK |
| Collaborating Institutions | School of Psychology, University of Nottingham, UK |
| Researcher/Project Coordinator | Patrick Bennett - bennett@mcmaster.ca Allison Sekuler - sekuler@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Cross-cultural investigation of the effects of autism on face perception

The investigators developed a novel method for examining how face identification is affected by autism. Future work will use this method to test ideas about how face-processing strategies differ between Japanese and Canadian observers, and whether the effects of autism on face perception differ between cultures.

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| Collaborating Countries | Japan |
| Collaborating Institutions | National Institute of Advanced Science & Technology, Japan |
| Researcher/Project Coordinator | Patrick Bennett - bennett@mcmaster.ca Allison Sekuler - sekuler@mcmaster.ca Mel Rutherford - rutherm@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

Effects of aging on the speed of visual processing

Developed new techniques for analyzing Event-Related Potentials (a measure of neural activity in the brain) and used them to study the effects of normal healthy aging on visual processing.

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| Collaborating Countries | UK |
| Collaborating Institutions | Center for Cognitive Neuroimaging, University of Glasgow, UK SFC Brain Imaging Centre, Western General Hospital, Edinburg, UK |
| Researcher/Project Coordinator | Patrick Bennett - bennett@mcmaster.ca Allison Sekuler - sekuler@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

The effects of HIV on vision

Using an ipad-based visual stimulator to conduct a visual examinations of clinical populations in South Africa, with a particular interest in examining the effects long-term HIV infection on visual perception.

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| Collaborating Countries | South Africa, USA |
| Collaborating Institutions | University of Pretoria, South Africa Schepens Eye Research Institute, Boston Mass., US |
| Researcher/Project Coordinator | Patrick Bennett - bennett@mcmaster.ca Allison Sekuler - sekuler@mcmaster.ca |

PROJECT CATEGORY: EDUCATION, COMMUNITY OUTREACH, LOCALLY AND ACROSS THE WORLD
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

CIHR Canadian National Brain Bee

<http://brainbee.ca>

The brain bee is a 3-tiered competition for high school students who test their knowledge of neuroscience. There are local and national competitions across the world. In Canada, we have local competitions in 15 different cities/universities (so far). McMaster hosts the Canadian National Brain Bee (2013 is our 6th annual). Our champion represents Canada internationally (IBB is in a different location each year, this year the IBB is in Vienna, Austria).

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| Collaborating Countries | 37 countries involved in the 2013 International Brain Bee: Argentina, Australia, Bangladesh, Belgium, Brazil, Cameroon, Canada, China, Egypt, Germany, Georgia, Ghana, Grenada, Hong Kong, India, Italy, Kenya, Lithuania, Malaysia, Mexico, New Zealand, Nigeria, Poland, Portugal, Romania, Saudi Arabia, Scotland, Singapore, South Korea, Spain, Switzerland, Turkey, Uganda, United Arab Emirates, United States of America, Venezuela, Wales http://www.internationalbrainbee.com/natl_beets.html |
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| Collaborating Institutions | Across Canada, we have 15 regional brain bee competitions hosted by: U Calgary, U Alberta, Dalhousie U, U Guelph, McMaster U, Queen's U, Western U, McGill U, U Ottawa, Memorial U, Newfoundland, U Toronto, UBC, U Victoria, U Waterloo, U Winnipeg |
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| Researcher/Project Coordinator | Judith M Shedden - shedden@mcmaster.ca |
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Faculty of Social Sciences



Faculty of Social Sciences

DEPARTMENT OF ANTHROPOLOGY

PROJECT CATEGORY: RESEARCH
ANTHROPOLOGY

Conservation as State Governance and as Local Co-occupation of Lands – Case Studies of Conflicts Among Governments, Conservationists and Indigenous Peoples

State conservation is often a means to governance of lands and people in conflicts with Indigenous Peoples. Diverse local peoples inhabit lands under duress by sustaining local conservation practices and relationships. This results in a succession of conflicts and agreements that confound the interventions of conservationists.

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| Collaborating Countries | Canada, US, France |
| Collaborating Institutions | McMaster University, McGill University, Memorial University, Museum Nationale d'Histoire Naturelle (France) (MNHN), Parks Canada, Grand Council of the Crees (Eeyou Istchee), Cree First Nation of Waswanipi (CFNW) |
| Researcher/Project Coordinator | Harvey Feit - feit@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
ANTHROPOLOGY

Relational Ontologies in Indigenous – State Co-Governance Conflicts and in Contemporary Social Movements

Ethnographers have explored non-modern forms of governance of Indigenous and non-Indigenous peoples. We explore ethnographies of Indigenous governance in the midst of nation states that involve recurrent conflicts and agreements, and consider the implications for activist projects to rethink everyday agency in social movements.

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| Collaborating Countries | Canada, US |
| Collaborating Institutions | University of Waterloo, University of California (Davis), Memorial University, Grand Council of the Crees (Eeyou Istchee) (GCC), Cree First Nation of Waswanipi (CFNW) |
| Researcher/Project Coordinator | Harvey Feit - feit@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
ANTHROPOLOGY

Generic Pastness and Religiosity: Muslimness in the Deep South of Thailand

Like my previous project on the silencing of Cold War history in Sarawak, Borneo, the current project is concerned with the ways in which regimes of fear affect the way the minorities relate to one another and to those in authority – in this case how Muslimness in southern Thailand are produced, under what constraints and structures, and by what technologies of affect and force. My current research is part of a larger project on separatist movements seeking national liberation in different (and yet similar) geopolitical settings. In this regard, this project is a continuation of my earlier work insofar as I focus on the relationship between violence, history, memory, economics, and political formations.

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| Collaborating Countries | Thailand |
| Collaborating Institutions | Faculty of Political Science at Thammasat University, Bangkok Department of Humanities and Social Sciences, Prince of Songkhla University, Pattani |
| Researcher/Project Coordinator | Kee Howe Yong - yongk@mcmaster.ca |

PROJECT CATEGORY: RESEARCH/EDUCATION
ANTHROPOLOGY

The Basentello Archaeological Research Project, Studying Cultural Hybridization in the Basentello River Valley: Archaeological, Osteological, and Ecological Evidence for Cultural Interaction

My part of the project focuses on the excavation of a Roman period cemetery and analysis of the human remains. I run a field school at Vagnari for McMaster undergraduate students in the summer (Anth3W03/3BF3), and take graduate students to provide training.

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| Collaborating Countries | Canada, England, Italy, Scotland |
| Collaborating Institutions | St. Mary's University, Canada Mt. Allison University, Canada Edinburgh University, Scotland Sheffield University, England |
| Researcher/Project Coordinator | Tracy Prowse - prowset@mcmaster.ca |

PROJECT CATEGORY: RESEARCH/EDUCATION
ANTHROPOLOGY

Alternative Culture Beyond Borders

This project explores what kinds of alternative models of culture, especially artistic and political culture, are emerging in post-socialist conditions. It also looks at the ways in which a generation that did not grow up with socialism but was born during the period of perestroika engages with the past, and either uses or rejects the socialist past to forge new democratic configurations for itself.

Collaborating Countries Russia; Romania; Bosnia-Herzegovina; Slovakia; Ukraine; Canada

Researcher/Project Coordinator Petra Rethmann - rethman@mcmaster.ca

PROJECT CATEGORY: RESEARCH/EDUCATION
ANTHROPOLOGY

Teaching Social and Cultural Geography: Critical Concepts, Political Landscapes, and Cultural Identity/ies in the Globalizing World

A core theme that both faculty and students will explore during this year is the place and role of social and cultural geography in the humanities in the context of the disciplinary division of knowledge in Eastern European. In doing this we focus on several questions:

- a) How social and cultural geography overlaps with urban sociology and cultural anthropology. Are there any specifics in the ways social theory is used and applied in this region?
-To what extent can the experiences of people living in concrete places be incorporated into current social scientific theories? In what ways and to what extent do local dynamics and processes refuse to meld into one all-encompassing narrative of globalization?
-As local geographies become increasingly integrated into global geographies, what are the ways in which to analyze the social construction of time-space in terms of differences between places, temporalities and subjects?
- b) How is social geography related to leading social theories like ANT, non-representational theory, etc.?
-How can the spatial turn be thought together with the mobility turn and turn to materiality?

Collaborating Countries Lithuania; Russia; Canada

Collaborating Institutions European Humanities University/ Alternative Culture Centre

Researcher/Project Coordinator Petra Rethmann - rethman@mcmaster.ca

PROJECT CATEGORY: RESEARCH
ANTHROPOLOGY

Return to the Future: The Collective and Political Afterlife of the Soviet Union

The central objectives of this project are:

- a) To contribute to a mapping of the political imaginations and practices employed by Russia's critical and progressive groups and publics, and to consider the political potentials and alternative social resources that might be generated out of them.
 - b) To bring together questions about agency and revolutionary culture, on the one hand, and debates about national and global futures, on the other.
 - c) To highlight the importance of political imaginings in moments of political and economic disenchantment, especially for societies grappling with their general devaluation; for a citizenry trying to position itself in relation to refurbished processes of nationalism, and the injurious effects of accelerated processes of capitalism and globalization; and for those trying to formulate modes of belonging, sociality, and resistance that exceed the particularities of bounded communities and nations, particularly in light of the recent waves of political and nationalist violence in Russia.
- The overarching goal of this project is to produce an analytically and ethnographically rich study of the political, and collective practices and ideas that form the seeds of alternative futures, in Russia and beyond. It will also provide a valuable resource for those interested in the politics of post-socialist life, as well as for those interested in the manifold challenges faced by newly democratizing societies.

Collaborating Countries Russia

Researcher/Project Coordinator Petra Rethmann - rethman@mcmaster.ca

PROJECT CATEGORY: RESEARCH
ANTHROPOLOGY

From Neolithisation to state formation: reconstructing interaction networks and the dynamics of socio-economic change through Obsidian sourcing in the Aegean and Anatolia 10th-2nd millennia BCE

This project will use obsidian sourcing to reconstruct the dynamics of socio-economic change in Anatolia and the Aegean during the 10th-2nd millennia BCE. A large-scale study using the analytical facilities of my new lab will enable us to map networks of community interaction in the context of: (1) the spread of agriculture from the Near East to Greece (10th-8th millennia BCE), (2) the emergence of social complexity in Western Anatolia and the Aegean in the later 3rd millennium BCE (3) the appearance of state-level societies on Crete c. 1900 BCE. While grounded in regional specifics, the project approaches major questions in archaeology and the social sciences, namely the relationship between material culture and identity, and the role of interaction at distance in socio-economic change.

Faculty of Social Sciences

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| Collaborating Countries | Greece, Turkey, Iraq |
| Collaborating Institutions | Institute of Geological and Mining Exploration (Greece) Van University (Turkey) Northern Iraq / Kurdistan Ministry of Culture |
| Researcher/Project Coordinator | Tristan Carter - stringy@mcmaster.ca |

DEPARTMENT OF ECONOMICS

PROJECT CATEGORY: RESEARCH
ECONOMICS

Trade policies and firm behaviour in the presence of firm heterogeneity

The primary objective of this proposal is to estimate the structural parameters of the theoretical model with multi-dimensional firm heterogeneity developed by Demidova, Kee and Krishna (2008) and look for its policy implications. There has recently been an explosion of work on models of trade with firm heterogeneity. This work builds on the seminal work of Melitz (2003) and Melitz and Ottaviano (2008) who extend the workhorse model of monopolistic competition in an open economy developed in the late 1970's and 1980's to incorporate firm heterogeneity, and of Eaton and Kortum (2002) who embed firm heterogeneity into a Ricardian setup with technological uncertainty and Bertrand competition. This work has attracted a great deal of interest as such models both make much richer and more nuanced predictions about trade (like its differential effects on more versus less productive firms, for example), and deliver some seemingly surprising comparative statics results (like unilateral trade liberalization being welfare reducing). It has also led to even more empirical work in this area (though in all fairness, the empirical work using this paradigm (see Roberts and Tybout (1997) and Tybout (2002) for a survey) occurred well before the theoretical work that put heterogeneous firm models into a general equilibrium setting.)

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| Collaborating Countries | US |
| Collaborating Institutions | Penn State University |
| Researcher/Project Coordinator | Svetlana Demidova - rethman@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
ECONOMICS

A Unified Framework for Nonparametric Instrumental Variables Estimation

Funded by SSHRC, 2013-2018, Insight Grant, this project will pull together leading researchers from around the world to build a unified framework for analysis of statistical methods to deal with assessing 'causal' relationships for data in which causality can 'run in both directions'.

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| Collaborating Countries | France, South Africa, Australia |
| Collaborating Institutions | University of Toulouse 1, University of Pretoria, University of Melbourne |
| Researcher/Project Coordinator | Jeffrey S. Racine - racinej@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
ECONOMICS

Understanding giving in Canada and the United Kingdom

The project was to develop and execute a survey about individual giving, fundraising and sponsorship. The survey was conducted by working with a private company called justgiving.com and soliciting their users. The survey results have been summarized and presented to stakeholders and policy analysts in a workshop in the UK. We have recently linked the survey results to administrative data from just giving and will use both sources of data to explore various research questions around fundraising and sponsorship.

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| Collaborating Countries | England, USA |
| Collaborating Institutions | University of Bristol University of California, San Diego University of Warwick |
| Researcher/Project Coordinator | Abigail Payne - paynea@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
ECONOMICS

Empirical Issues in Public Economics: Education and Charities

This project has involved various studies on charitable giving and the effects of government policies on student outcomes.

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| Collaborating Countries | England, USA |
| Collaborating Institutions | University of California, Berkeley; University of Bristol; University of California, San Diego; Wilfred Laurier University |
| Researcher/Project Coordinator | Abigail Payne - paynea@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
ECONOMICS

Hypothetical Bias in Value Orientations Ring Games

We are trying to identify the existence of hypothetical bias in the measurement of individual social value orientations (altruism, cooperation, individualism, competitiveness and aggression) with respect to distributions of assets (income or wealth). The treatment variables are whether or not the decisions people make are incentivized (people receive payments based on their decisions or do not receive payments based on their decisions).

This research is a spin-off from a project Professor Mentzakis began at McMaster in 2009. This has been in progress since 2010.

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| Collaborating Countries | United Kingdom |
| Collaborating Institutions | University of Southampton |
| Researcher/Project Coordinator | Stuart Mestelman - mestelma@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
ECONOMICS

Managing Common Pool Resources through Output Sharing

We are studying the effects of communication within and across computing groups who are appropriating resources from a common pool (such as a fishery). We are evaluating the effectiveness of output sharing to manage appropriation from a common pool when appropriators are able to communicate with one another.

This research has been ongoing throughout 2009-2013.

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| Collaborating Countries | Switzerland |
| Collaborating Institutions | University of Zurich |
| Researcher/Project Coordinator | Stuart Mestelman - mestelma@mcmaster.ca R. Andrew Muller - muller.ra@gmail.com |

DEPARTMENT OF HEALTH, AGING AND SOCIETY

PROJECT CATEGORY: RESEARCH
HEALTH, AGING AND SOCIETY

Strengthening Health Systems in Low Income countries through improving their Priority Setting processes: The case of H1N1, HIV and prenatal conditions

Priority setting, the allocation of resources between competing needs is one of the greatest challenges faced by policy makers worldwide, but arguably so in low income countries. In Low-Income Countries (LICs), where resources are extremely scarce, health care spending decisions mean life or death for many. This makes it critical that health sector Priority Setting (PS) should be done well. However, PS in LICs has been described as ad hoc, and to be full of uncertainties due to limited availability of credible evidence to support decision making, lack of systematic decision making processes, political instability, extreme resource constraints (which prevent implementation of decisions), and limited accountability. Improving priority setting would strengthen the performance and sustainability of these health care systems and improve equity in access and health outcomes. However, there has been limited focus on developing frameworks for evaluating PS. To address this gap in the literature, Kapiriri et al, 2009, developed a conceptual framework to evaluate PS in LICs. This research is to further this work in developing a conceptually robust and field tested framework for evaluating PS in LICs by; integrating further expert (LICs based) opinion into this framework, use it to explore and evaluate an actual PS process, and refine it in dialogue with its potential users in LICs. This will be achieved through a case study of macro-level priority setting in Uganda; where we will describe and evaluate PS with particular focus on H1N1, HIV and Perinatal conditions. The central outcome of the research will be a conceptually and practically robust resource for evaluating and strengthening PS in LIC. Priority setting, if done well, presents an extremely powerful tool for improving equity in health care access and health outcomes, as well as sustainability of health care systems.

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| Collaborating Countries | Norway, Netherlands, Uganda |
| Collaborating Institutions | University of Bergen, Norway; Nijmegen University, Netherlands, Makerere University, Uganda |
| Researcher/Project Coordinator | Lydia Kapiriri - kapirir@mcmaster.ca |

DEPARTMENT OF POLITICAL SCIENCE

PROJECT CATEGORY: RESEARCH
POLITICAL SCIENCE

Integration of Skilled Immigrants into the Australian and Canadian Workplace

Explore integration policies and practices and their role in supporting integration of immigrants in Australia and Canada.

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| Collaborating Countries | Australia |
| Collaborating Institutions | Monash University |
| Researcher/Project Coordinator | Ahmed Shafiquel Huque - huqueas@mcmaster.ca |

PROJECT CATEGORY: EDUCATION
POLITICAL SCIENCE

Capacity Building for Higher Education in Developing Countries

Member of independent review committee to assess proposals submitted to the Norwegian Program for Capacity Development in Higher Education and Research for Development.

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| Collaborating Countries | Norway |
| Collaborating Institutions | Norwegian Agency for Development Cooperation |
| Researcher/Project Coordinator | Ahmed Shafiquel Huque - huqueas@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
POLITICAL SCIENCE

Political Representation of Ethnic Minorities and Immigrants in Parliamentary Democracies

Project assembled a team of scholars from 12 countries (Canada, U.S.A., Belgium, France, U.K., Netherlands, Sweden, Norway, Denmark, Germany, Austria, Spain) to investigate immigrants and ethnic minorities as political actors. Study addresses levels of voter turnout among migrants/minorities; voter choice; factors that determine their chances of getting nominated or elected to a parliamentary mandate; and impact of immigrant/ethnic minority MPs as parliamentary actors. Resulted in book: Karen Bird, Thomas Saalfeld, Andreas M. Wüst (eds.). *The Political Representation of Immigrants and Minorities: Voters, Parties and Parliaments in Liberal Democracies*. (London: Routledge, 2011). Participants continue to work together on related projects.

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| Collaborating Countries | Germany, UK |
| Collaborating Institutions | University of Mannheim Bamberg University University of Kent, Canterbury |
| Researcher/Project Coordinator | Karen Bird - kbird@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
POLITICAL SCIENCE

A quantitative and qualitative examination of Latin American welfare regimes since the 1940s

During the last two decades, welfare policies, particularly pensions, health care, and social assistance, have been the focus of intense reform efforts throughout Latin America. Empirically, have recent incremental changes of various welfare policies resulted in a cumulative and fundamental shift in the distributional profile of welfare policy across the region? What roles do structural changes in labour markets due to neoliberal economic reform and globalization and the policy legacies of existing political and policy institutions play in explaining the shift in welfare policy? Given recent changes and their economic and political origins, what are the likely consequences of the recent shift in social policy for poverty, equity, and the development of cohesive and effective social policy in the region? This research program will answer the above questions by combining the construction and analysis of a new dataset of indicators of Latin American welfare policy in 18 countries with a qualitative comparative historical study of changes in welfare policy since the 1940s. The theoretical framework will advance our understanding of the relationships among the structure of the economy, the articulation of class interests and coalitions, political and economic institutions, and institutional change. The research program will also contribute insight into debates regarding the role of the state in a globalized economy, providing a basis upon which we can theoretically explain variations in state welfare provision despite similar global pressures.

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| Collaborating Countries | United States, Mexico, Colombia, Argentina, Brazil, Chile, Peru, Costa Rica, Bolivia, Ecuador |
| Researcher/Project Coordinator | Michelle Dion - dionm@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
POLITICAL SCIENCE

Ideas and Institutions in East Asian Regionalism

The goals of this study, then, are: 1) to examine the ideational constructs which underpin the different approaches to East Asian regionalism; 2) to map the institutional development of the various regional organizations both at the state and non-state level that have emerged in East Asia; 3) to evaluate which set of ideas is likely to prevail in the political battle over the future of East Asian regionalism; 4) to assess the impact that East Asian regionalism will have on other regions of the world and on attempts to develop global norms that could underpin a global governance structure; and 5) to contribute to the development of ideational institutionalism as a way of understanding the growth of key political organizations.

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| Collaborating Countries | Australia, Singapore |
| Researcher/Project Coordinator | Richard Stubbs- stubbsr@mcmaster.ca |

DEPARTMENT OF RELIGIOUS STUDIES

PROJECT CATEGORY: RESEARCH
RELIGIOUS STUDIES

Mark and Matthew, Text and Contexts II: Hermeneutics, Reception History, Theology (Funded by SSHRC; 2009)

A project bringing together scholars from eight (8) countries, with the task of investigating, comparatively, hermeneutical and reception-historical aspects of the late first-century Gospels, Mark and Matthew. The collaboration has resulted in the publication of a book, edited by Becker and Runesson (May 2013).

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| Collaborating Countries | Canada and Denmark |
| Collaborating Institutions | Department of Religious Studies, McMaster University, and Department of Culture and Society, Aarhus University, Denmark |
| Researcher/Project Coordinator | Anders Runesson - runess@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
RELIGIOUS STUDIES

Beyond Theology: Ancient Polemics, Identity Formation, and Modern Scholarship (Application submitted to a major Swedish funding organization; results will be announced October 2013)

A four-year research project aiming at understanding the construction of religious identities, with a focus on Judaism and Christianity and their inter-relationship.

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| Collaborating Countries | Canada and Sweden |
| Collaborating Institutions | Department of Religious Studies, McMaster University, Center for Theology and Religious Studies, Lund University, Sweden. Faculty of Theology, Uppsala University, Sweden |
| Researcher/Project Coordinator | Anders Runesson - runess@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
RELIGIOUS STUDIES

The Scripture of the Heroic March, a Chinese Buddhist Apocryphon

The Suramgama's influence extended well beyond the period and milieu in which it originally appeared. It affected Buddhist monastic practice, especially in the Chan (Zhen) tradition, by providing the source for a ritual that became standard in the Song dynasty (960-1279). The so-called "Suramgama assembly" was held semi-annually during monastic retreats, and there the participants chanted the long magical spell contained in the sutra. This spell was also recited at memorial services for Chan abbots and patriarchs. In Korea, the sutra was a required text in the monastic examination system. In the realm of doctrine, especially from the Song period onwards, the scripture attracted much commentary. My study will survey this vast body of literature, still largely unexplored, as it promises to illuminate the doctrinal vitality of Buddhism in later Chinese history, a period when the religion was supposedly in decline. The Suramgama was especially popular with Chinese laywomen and it had a particularly strong influence on the religious life of elite females of the eighteenth century.

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| Collaborating Countries | China, Japan, Korea, and Vietnam |
| Researcher/Project Coordinator | James Benn - relschi@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
RELIGIOUS STUDIES

The origins, development, and impact of biblical commentary in early Jewish exegesis: the changing face of ancient biblical interpretation in religious and historical context

The aim of this project is to fill a significant gap in our knowledge of biblical interpretation from the late Persian to Early Roman periods (c. 5th cent. BCE -- 2nd cent. CE) by carrying out a historical study of the transition from so-called "rewritten Bible" type texts and other early Jewish forms of biblical interpretation to the "biblical commentary" mode of exegesis that eventually came to be dominant, and remains the standard form of interpretation in Judaism, Christianity, and the academy of this day. This will entail the intensive study of both a select group of ancient "biblical commentary" texts (e.g. the Qumran pesharim and Philo of Alexandria's Questions and Answers on Genesis and Exodus) and the social and historical setting that gave rise to them.

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| Collaborating Countries | Germany |
| Researcher/Project Coordinator | Daniel Machiela, Principal Applicant - mmachiela@mcmaster.ca |

SCHOOL OF SOCIAL WORK

PROJECT CATEGORY: RESEARCH
SOCIAL WORK

Children and Women Trafficking within Central American Forced Migrations – Nicaragua’s Experience

The commercial sexual exploitation of children (CSEC), which is estimated to involve almost 2 million children worldwide, has been characterized as a “borderless phenomenon” that requires an international effort to eradicate (Report of the Second World Congress against Commercial Sexual Exploitation of Children, 2001). Government and societal attitudes of apathy, blame, and devaluation towards women, children, and victims of CSEC need to be changed through empirically sound research that clarifies the scope and nature of CSEC within local contexts. Understanding CSEC as a part of the continuum of violence and oppression against young women and children is critical to developing solutions that address the reality of exploited individuals. At the same time, clarifying the role of global forces in creating conditions that sustain CSEC is critical to support local and international efforts to protect children’s rights and criminalize and prosecute perpetrators. The current attention on issues of globalization, gender imbalances and child rights in Latin America makes this an important opportunity to demonstrate Canada’s excellence in a growing international field. Research site: Estelí

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| Collaborating Countries | Nicaragua |
| Collaborating Institutions | Universidad Nacional Autónoma de Nicaragua – Facultad Regional Multidisciplinaria (FAREM) – Campo de Estelí [Nacional Autónomos University of Nicaragua-Regional Multidisciplinary Faculty – Estelí; Campus & Miriam Association - Estelí, Nicaragua; School of Social Work, Ryerson University |
| Researcher/Project Coordinator | Mirna Carranza - carranz@mcmaster.ca |

PROJECT CATEGORY: GLOBAL PARTNERSHIP
SOCIAL WORK

Empowering Women Against the Commercial Sexual Exploitation of Children: Developing an International Partnership for Research and Action

The main goal of this project was to develop partnerships in Nicaragua in, both Pacific and Atlantic Coast. Community consultations and town hall meetings were held with key stakeholders; i.e., government institutions and non-government organizations charged with the protection, policy and program development for women and children from vulnerable groups – specifically Indigenous and Black groups in rural areas. The project culminated with a national forum regarding the trafficking of children and women for the purpose of commercial sexual exploitation and the development of a five-year research and development program with the partners involved.

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| Collaborating Countries | Nicaragua |
| Collaborating Institutions | Universidad Nacional Autónoma de Nicaragua – Facultad Regional Multidisciplinaria (FAREM) – Campo de Estelí [Nacional Autónomos University of Nicaragua-Regional Multidisciplinary Faculty – Estelí; Campus & Miriam Association - Estelí, Nicaragua; School of Social Work, Ryerson University |
| Researcher/Project Coordinator | Mirna Carranza - carranz@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
SOCIAL WORK

Forced migration: Children and women trafficking within Central America – Nicaragua’s experience

This proposal addresses the sexual exploitation of women, adolescents, and children from the perspective of human rights and gender violence. There are three important objectives in this research: (1) To plan the implementation of an Institutional Ethnography of the Child Welfare and Women Support Systems that provide services to children and women who have been trafficked and sexually exploited in Nicaragua; (2) To develop a valid and reliable research survey that will allow us to measure incidence of children and women involved in trafficking and sexual commercial exploitation in Nicaragua; And (3) To pilot an incidence study to measure the different forms of forced migrations and trafficking from Nicaragua to other Central American countries and to Mexico, United States and Canada, (4) To initiate relationships with Nicaraguan’s bordering municipalities with Honduras and El Salvador.

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| Collaborating Countries | Nicaragua |
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| Collaborating Institutions | Universidad Nacional Autónoma de Nicaragua – Facultad Regional Multidisciplinaria (FAREM) – Campo de Estelí [Nacional Autónomos University of Nicaragua-Regional Multidisciplinary Faculty – Estelí; Campus & Miriam Association - Estelí, Nicaragua; School of Social Work, Ryerson University] |
| Researcher/Project Coordinator | Mirna Carranza - carranz@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
SOCIAL WORK

Forced migration II: Children and women trafficking within Central America – Nicaragua’s experience

The commercial sexual exploitation of children (CSEC), which is estimated to involve almost 2 million children worldwide, has been characterized as a “borderless phenomenon” that requires an international effort to eradicate (Report of the Second World Congress against Commercial Sexual Exploitation of Children, 2001). Government and societal attitudes of apathy, blame, and devaluation towards women, children, and victims of CSEC need to be changed through empirically sound research that clarifies the scope and nature of CSEC within local contexts. Understanding CSEC as a part of the continuum of violence and oppression against young women and children is critical to developing solutions that address the reality of exploited individuals. At the same time, clarifying the role of global forces in creating conditions that sustain CSEC is critical to support local and international efforts to protect children’s rights and criminalize and prosecute perpetrators.

The current attention on issues of globalization, gender imbalances and child rights in Latin America makes this an important opportunity to demonstrate Canada’s excellence in a growing international field. Research site: Atlantic Coast & Bordering municipalities with Costa Rica.

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| Collaborating Countries | Nicaragua |
| Collaborating Institutions | Universidad Nacional Autónoma de Nicaragua – Facultad Regional Multidisciplinaria (FAREM) – Campo de Estelí [Nacional Autónomos University of Nicaragua-Regional Multidisciplinary Faculty – Estelí; Campus & Miriam Association - Estelí, Nicaragua; School of Social Work, Ryerson University] |
| Researcher/Project Coordinator | Mirna Carranza - carranz@mcmaster.ca |

DEPARTMENT OF SOCIOLOGY

PROJECT CATEGORY: RESEARCH
SOCIOLOGY

Harm or Right? Polygamy’s Contested Terrain Within and Across Borders

How does the criminalization of polygamy challenge nation-states to wrestle with competing laws and values of women’s right to equality, the right to freedom of religion and culture, and the right to sexual and familial intimacy? This comparative research examines polygamy’s regulation to offer a window into national tensions concerning cultural tradition and transformations in sexual intimacy and family life in a globalizing world, and current practices to contend with contested meanings of gender equality, citizenship, human rights, and religious freedom. It seeks to answer three broad questions: 1) Does polygamy’s criminalization expand democratic citizenship rights and gender equality? 2) How do governments seek to balance competing rights of equality, sexual and familial intimacy, and religious freedom in regulating polygamy? 3) How do understandings of cultural patterns and laws regarding polygamy move across borders?

This five-year research project will use ethnographic methods and legal and media analysis to compare polygamy’s criminalization in Canada, the United States, France, and Benin. Canada and the United States share an Anglo-Protestant heritage and a common border, and both face increasing concern over polygamy’s practice among fundamentalist Mormons. In France, where roughly 140,000 people live in polygamy, the government passed new legislation that seeks to compel these families to “de-cohabit.” Benin, a former French Colony, officially outlawed polygamy in 2004, but many people continue the practice. Studying competing rights in the regulation of polygamy will contribute to an emerging body of research that seeks to understand how rights, gender, sexuality, and culture interact, come into conflict, and discursively construct one another. This research will further add to the growing body of literature on rights and citizenship by mapping out the boundaries of inclusion and exclusion that reflect broad political patterns of social difference and inequality, and apply to other global issues such as the politics of the “veil” and sex trafficking.

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| Collaborating Countries | France, US, Benin |
| Researcher/Project Coordinator | Melanie Heath - mheath@mcmaster.ca |



Collaborative Work Across Faculties



Faculty of Science

CENTRE FOR CLIMATE CHANGE/ SCHOOL OF GEOGRAPHY AND EARTH SCIENCES

PROJECT CATEGORY: RESEARCH

CLIMATE CHANGE/SCHOOL OF GEOGRAPHY AND EARTH SCIENCES

North American Carbon Program (NACP)

The North American Carbon Program (NACP) is a multidisciplinary research program to obtain scientific understanding of North America's carbon sources and sinks and of changes in carbon stocks needed to meet societal concerns and to provide tools for decision makers. The NACP is supported by a number of different US federal agencies through a variety of intramural and extramural funding mechanisms and award instruments. NACP will rely upon a rich and diverse array of existing observational networks, monitoring sites, and experimental field studies in North America and its adjacent oceans. Integrating these different program activities and maximizing synergy amongst them, will require expert guidance beyond the norm for large field programs in Earth system science and global climate change. Canadian Carbon Program (CCP) had extensively with NACP.

Collaborating Countries USA

Collaborating Institutions NASA, DOE, NOAA, USDA, USGS from United States.

Researcher/Project Coordinator M. Altaf Arain aarain@mcmaster.ca

Faculty of Science/Faculty of Humanities

DEPARTMENT OF BIOLOGY/ CENTRE FOR PEACE STUDIES

PROJECT CATEGORY: EDUCATION

BIOLOGY/PEACE STUDIES

AUCC Student Internship program (2011-2013)

From 2006-2010 we used to send basically 1-2 AUCC student Interns to India to work with women under the MSS program. In 2011 CIDA started a 4-year program which allowed to send out 5 students each year for 4 years from McMaster and to bring 2 foreign students to McMaster. I applied and was awarded a 4-year grant which later due to budget cut was reduced to two years. Under this program we sent 5 students to BHU (India) last September and brought in one student from India. The final batch of 5 will go out again to BHU next September. The program will be phased out by March 2014.

Collaborating Countries Canada, India

Collaborating Institutions Centre for Peace Studies, McMaster University, Banaras Hindu University (BHU), Varanasi, India (MOU 2006) Shrambharati (NGO), India

Researcher/Project Coordinator Rama Singh - singh@mcmaster.ca

PROJECT CATEGORY: GLOBAL PARTNERSHIP
BIOLOGY/PEACE STUDIES

An on-going Collaboration since 2002: Mahila Shanti Sena (Women's Peace Brigade International): Women, peace and development (MSS/WPBI)

This is one of the most successful programs in University-Community collaborations. This is basically a women's peace and development program and it mainly consists of providing training to women (many of whom are illiterate) in the area of peace, nonviolence and participatory democracy. The training is done through holding 1-3 day long camps in different parts of India. In addition we hold an annual national conference that brings all the NGOs together. Starting with Bihar MSS has spread over seven states now. Over the last 10 years we have been able to train over 40,000 for a period of 1-3 days. The funding has mainly come from UNICEF, CIDA, Shastri Institute, and the community. MSS is more than a typical NGO; it's a women's self-empowerment program.

Collaborating Countries Canada, India

Collaborating Institutions Centre for Peace Studies, McMaster University, Gandhi Foundation (NGO), Edmonton Banaras Hindu University (BHU), Varanasi, India. Shrambharati (NGO), Bihar, India. Unnayan (NGO), Odisha, India. Kasturba Gandhi Foundation (NGO), Agartala, Tripura, India. Tamulpur Anchalik Gramdan Sangh (NGO), Assam, India. Mahila Shanti Sena (NGO), Manipur, India. Sarvodaya Mandal (NGO), Arunachal Pradesh, India. Vision Society (NGO), Varanasi, India. Gujarat Vidyapith (University), Ahmedabad, India

Researcher/Project Coordinator Rama Singh - singh@mcmaster.ca

DEPARTMENT OF ANESTHESIA/ CENTRE FOR SIMULATION BASED LEARNING

PROJECT CATEGORY: RESEARCH/EDUCATION
ANESTHESIA/CENTRE FOR SIMULATION BASED LEARNING

Simulation-based Assessment for Pediatric Anesthesiology: A Prospective Multicentre Study

Will simulation scenario performances reliably and consistently distinguish between novice and expert anesthesiologists and grade those in between?

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| Collaborating Countries | England, United Kingdom |
| Collaborating Institutions | Derriford Hospital Royal Manchester Children's Hospital Sheffield Children's Hospital Bristol Royal Hospital for Children. |
| Researcher/Project Coordinator | Bruno Borges - brunoborgesmd@gmail.com Linda Korz - korzl@hotmail.com Tal Shichor - shichor@mcmaster.ca Tracy Bruno - NA David Musson - musson@mcmaster.ca |

PROJECT CATEGORY: RESEARCH/EDUCATION
ANESTHESIA/CENTRE FOR SIMULATION BASED LEARNING

Evaluation of Cultural Differences in Debriefing By Analyzing the Contextual Aspects of Healthcare Simulation

The objective of this project is to develop culturally appropriate simulation-based learning and debriefing concepts and practices for simulation in health care. Our expectation is to improve and promote better learning concept for better application and implementation in patient care.

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| Collaborating Countries | Brazil, Colombia, Denmark, Japan, Norway, South Korea, USA |
| Collaborating Institutions | Yonsei University College of Medicine Dokkyo Medial University Koshigaya Hospital Danish Institute for Medical Simulation (DIMS) Stavanger Acute Medicine Foundation for Education and Research (SAFER) Michael S. Gordon Center for Research in Medical Education (GCRME) Centre for Simulation-Based Learning, McMaster University University of Sao Paulo School of Medicine Pontificia Universidad Javeriana |
| Researcher/Project Coordinator | David Musson - musson@mcmaster.ca |

PROJECT CATEGORY: RESEARCH/EDUCATION
ANESTHESIA/CENTRE FOR SIMULATION BASED LEARNING

Medical Simulation Research Support to the Canadian Space Agency at the In Situ Resource Utilization (ISRU) Space Analog Project

As a contracted research activity, this project examined the feasibility of using high fidelity patient manikin simulators in a remote space analog field setting. Concepts explored included remotely supervised trauma resuscitation, supervision of ultrasound-guided vascular access procedures, and the control of computer-controlled simulators over satellite mediated communications networks.

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| Collaborating Countries | Canada, United States, Germany |
| Collaborating Institutions | Canadian Space Agency (CSA) National Aeronautics and Space Administration (NASA) |
| Researcher/Project Coordinator | David Musson - musson@mcmaster.ca |

DEPARTMENT OF CLINICAL EPIDEMIOLOGY AND BIOSTATISTICS/ DEPARTMENT OF PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

PROJECT CATEGORY: RESEARCH

CLINICAL EPIDEMIOLOGY AND BIOSTATISTICS/
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Association of Urban Slum Residency with Infant Mortality and Child Stunting in Low and Middle Income Countries

Although rates of child malnutrition or mortality are generally higher in urban slums than in rural or overall urban areas, little is known if this elevated risk is either accounted for or modified by being born into poorer versus better-off households in slum neighborhoods. This study aimed to: (i) examine the contextual influences of urban slum residency on infant mortality and child stunting over and above individual and household characteristics, and (ii) identify factors that might modify any adverse effects. Data come from Demographic and Health Surveys conducted in 45 countries between 2001 and 2009. The respondents were women (15–49 years) and their children (0–59 months). Results showed that living in a slum neighborhood was associated with infant mortality (OR=1.34, 95%CI=1.15–1.57) irrespective of individual and household characteristics and this risk was attenuated among children born to women who had received antenatal care from a health professional (OR=0.79, 95%CI=0.63–0.99). Results also indicated that increasing child age exacerbated the risk for stunting associated with slum residency (OR=1.19, 95%CI=1.16–1.23). The findings suggest that improving material circumstances in urban slums at the neighborhood level as well as increasing antenatal care coverage among women living in these neighborhoods could help reduce infant mortality and stunted child growth.

Collaborating Countries Armenia, Albania, Azerbaijan, Bangladesh, Benin, Bolivia, Burkina Faso, Cambodia, Cameroon, Congo-Brazzaville, Democratic Republic of the Congo, Colombia, Dominican Republic, Ethiopia, Gabon, Ghana, Guinea, Haiti, Honduras, India, Jordan, Kenya, Lesotho, Liberia, Madagascar, Mali, Malawi, Moldova, Namibia, Nepal, Nicaragua, Niger, Nigeria, Philippines, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Swaziland, Tanzania, Timor-Leste, Turkey, Uganda, Ukraine and Zambia

Researcher/Project Coordinator Hmwe Kyu - kyuhh@mcmaster.ca
Harry Shannon - shannonh@mcmaster.ca
Katholiki Georgiades - georgik@mcmaster.ca
Michael Boyle - boylem@mcmaster.ca

PROJECT CATEGORY: RESEARCH

CLINICAL EPIDEMIOLOGY AND BIOSTATISTICS/
PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Cesarean Delivery and Neonatal Mortality Rates in 46 Low and Middle Income Countries: A Propensity Score Matching and Meta-analysis of Demographic and Health Surveys Data

Background:

The rationale for this study arises from the conflicting results and methodological limitations of previous research examining the association between cesarean delivery (CD) and neonatal mortality. The objectives of this study were: (1) to estimate the association between individual-level CD and neonatal mortality rates (NMR) in 46 countries; and (2) to examine if this association varies across countries depending on country-level factors.

Methods:

Data were from nationally representative Demographic and Health Surveys of women aged 15–49 years and their children (0–59 months) (N=392 883). Propensity score matching, meta-analysis and meta-regression were conducted to address the study objectives.

Results:

Results showed that the pooled odds ratio (OR) for the association between individual level CD and NMR in 46 countries was 1.67 (95%CI=1.48–1.89) with moderate heterogeneity ($I^2=39%$). Sub-group meta-analysis results indicated that individual-level CD was positively associated with NMR in countries with low (OR=1.99, 95%CI=1.71–2.33, $I^2=8.5%$) and medium (OR=1.53, 95%CI=1.29–1.82, $I^2=24%$) CD rates. There was substantial heterogeneity of CD effects among high CD rate countries ($I^2=63%$). Meta-regression results showed that the association between individual-level CD and NMR is conditional on country-level CD rates. Compared with high CD rate countries, the OR of NMR associated with individual-level CD was estimated to increase by a factor of 1.48 (95% CI=1.09–1.97) in low CD-rate countries.

Conclusions:

Studies are needed to better understand the adverse risks posed by CD in countries with low and medium CD rates and to find out possible reasons for the heterogeneity in CD effects across countries with high CD rates.

Collaborating Countries Azerbaijan, Bangladesh, Benin, Burkina Faso, Bolivia, Cambodia, Cameroon, Chad, Colombia, Congo-Brazzaville, Congo DR, Dominican Republic, Egypt, Ethiopia, Gabon, Ghana, Guinea, Haiti, Honduras, India, Indonesia, Jordan, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Morocco, Mozambique, Namibia, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Philippines, Rwanda, Senegal, Sierra Leone, Swaziland, Tanzania, Turkey, Uganda, Zambia, Zimbabwe.

Researcher/Project Coordinator Hmwe Kyu - kyuhh@mcmaster.ca
Harry Shannon - shannonh@mcmaster.ca
Katholiki Georgiades - georgik@mcmaster.ca
Michael Boyle - boylem@mcmaster.ca

GLOBAL HEALTH OFFICE/DEPARTMENT OF CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

PROJECT CATEGORY: RESEARCH/EDUCATION/GLOBAL PARTNERSHIP

GLOBAL HEALTH/CLINICAL EPIDEMIOLOGY & BIOSTATISTICS

Capacity Building in Higher Education

The Global Health Office and the Department of Clinical Epidemiology and Biostatistics are working together with King Saud University (KSU) to provide a model where KSU trainees have an opportunity to learn how to integrate research into their clinical practice. The main objective of the KSU-McMaster partnership is the enrollment of Saudi medical doctors into the Health Research Methodology (HRM) program. KSU has indicated they are able to fully support their trainees financially, as well as, provide McMaster with administrative fees/costs necessary to manage the partnership. There is a proposal from KSU and the team will be revising and sending an invitation to meet with KSU delegation to move this initiative forward through a contract for an agreed upon partnership model.

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| Collaborating Countries | Saudi Arabia |
| Collaborating Institutions | King Saud University, Riyadh |
| Researcher/Project Coordinator | Holger Schünemann - schuneh@mcmaster.ca Steven Hanna - hannas@mcmaster.ca Andrea Baumann - baumanna@mcmaster.ca |

DEPARTMENT OF PEDIATRICS/ DEPARTMENT OF PATHOLOGY AND MOLECULAR MEDICINE/ DEPARTMENT OF CLINICAL EPIDEMIOLOGY AND BIOSTATISTICS/ DEPARTMENT OF MEDICINE

PROJECT CATEGORY: RESEARCH

PEDIATRICS/ PATHOLOGY AND MOLECULAR MEDICINE/
CLINICAL EPIDEMIOLOGY AND BIOSTATISTICS/ MEDICINE

Optimization and Evaluation of Flocked Swab Transport Systems for the Identification of Enteric Pathogens in Botswana.

Treatment of diarrheal disease, the second leading killer of young children worldwide, is much easier when a diagnosis can be made. The best diagnostic tests are useless without properly collected and preserved specimens. The objective of this University of Botswana – McMaster University collaboration is to design and evaluate an easy-to-use specimen collection and transport system, compatible with multiple different ways of diagnosing disease, and optimizing the collection and preservation of samples.

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| Collaborating Countries | Botswana, US |
| Collaborating Institutions | University of Botswana University of Pennsylvania |
| Researcher/Project Coordinator | David Goldfarb (PI) - goldfar@mcmaster.ca Marek Smieja - smiejam@mcmaster.ca James Mahony - mahonyj@mcmaster.ca |

SCHOOL OF REHABILITATION SCIENCE/ DEPARTMENT OF MEDICINE/ DEPARTMENT OF CLINICAL EPIDEMIOLOGY AND BIOSTATISTICS

PROJECT CATEGORY: RESEARCH

REHABILITATION SCIENCE/MEDICINE/ CLINICAL EPIDEMIOLOGY AND BIOSTATISTICS

A Systematic and Methodological Review of Neuromuscular Electrical Stimulation in the Intensive Care Unit

CIHR-funded Knowledge Synthesis Grant

Critically ill patients in the intensive care unit (ICU) are the sickest in the hospital, and need life-saving technology such as breathing machines to stay alive. If patients survive their critical illness, up to 1 in 4 have severe leg weakness impairing their quality of life for up to 5 years after ICU discharge. One common physiotherapy treatment, electrical muscle stimulation, may help to increase muscle strength. Recently, many studies of muscle stimulation in the ICU were reported in science journals. However, no one has examined all of them to determine their true effect. A systematic review is a scientific way to find all studies on a topic, check their quality, and summarize their results. We will do a systematic review of the studies of electrical muscle stimulation in the ICU to understand how helpful or harmful this treatment is for weak critically ill patients. We will involve Knowledge Users such as clinicians, (doctors, nurses, physiotherapists), decision makers (who decide on healthcare staffing and purchasing devices such as the muscle stimulator), and researchers (with critical care and rehabilitation backgrounds). These Knowledge Users do not usually collaborate, but it is very important to understand their different ideas about electrical stimulation in the ICU before we start to collect data for the review, and after we have all the information. Knowledge User involvement will improve our analysis of studies to date, ensure thoughtful interpretation about using electrical muscle stimulation in practice, and help to plan future studies. As critical care services and the demand for breathing machines for critical illness in Canada is expected to increase by 80% due to our aging population, this project will give us important information about the usefulness of muscle stimulation in ICU survivors to minimize weakness, speed recovery and improve function.

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| Collaborating Countries | US |
| Collaborating Institutions | Dale M. Needham, Johns Hopkins University, Baltimore, MD, US Margaret S. Herridge, University of Toronto, ON, CAN Francois Lamontagne, Universite de Sherbrooke, Sherbrooke, QC Karen Koo, University of Western Ontario, London, ON Peter Dodek, University of British Columbia, Vancouver, BC |
| Researcher/Project Coordinator | Michelle Kho - khome@mcmaster.ca Deborah Cook - debcook@mcmaster.ca Mark Duffett - duffett@hhsc.ca |

DEPARTMENT OF CLINICAL EPIDEMIOLOGY AND BIOSTATISTICS/ DEPARTMENT OF PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

PROJECT CATEGORY: RESEARCH

CLINICAL EPIDEMIOLOGY AND BIOSTATISTICS/PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Evaluation of the Association between Long-lasting Insecticidal Nets Mass Distribution Campaigns and Child Malaria in Nigeria

Background

Nigeria carries the greatest malaria burden among countries in the world. As part of the National Malaria Control Strategic Plan, free long-lasting insecticidal nets (LLINs) were distributed in 14 states of Nigeria through mass campaigns led by different organizations (the World Bank, UNICEF, or the Global Fund) between May 2009 and August 2010. The objective of this study was to evaluate the association between LLIN distribution campaigns and child malaria in Nigeria.

Methods

Data were from the Nigeria Malaria Indicator Survey which was carried out from October to December 2010 on a nationally representative sample of households. Participants were women aged 15-49 years and their children aged less than five years (N=4082). The main outcome measure was the presence or absence of malaria parasites in blood samples of children (6-59 months).

Results

Compared with children living in communities with no campaigns, those in the campaign areas were less likely to test positive for malaria after adjusting for geographic locations, community- and individual-level characteristics including child-level use of insecticide-treated nets (ITNs). The protective effects were statistically significant for the World Bank Booster Project areas (OR=0.18, 95% CI=0.04-0.73) but did not reach statistical significance for other campaign areas. Results also showed that community-level wealth (OR=0.51, 95% CI=0.34-

0.76), community-level maternal knowledge regarding malaria prevention (OR=0.70, 95% CI=0.50-0.97), and child-level use of ITNs (OR=0.79, 95% CI=0.63-0.99) were negatively associated with child malaria.

Conclusions

The observed protective effects on child malaria of these campaigns (statistically significant in the World Bank Booster Project areas and non-significant in the other areas) need to be corroborated by future effectiveness studies. Results also show that improving community-level maternal knowledge through appropriate channels might be helpful in preventing child malaria in Nigeria.

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| Researcher/Project Coordinator | Hmwe Kyu - kyuh@mcmaster.ca Harry Shannon - shannonh@mcmaster.ca Katholiki Georgiades - georgik@mcmaster.ca Michael Boyle - boylem@mcmaster.ca |
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PROJECT CATEGORY: RESEARCH

CLINICAL EPIDEMIOLOGY AND BIOSTATISTICS/PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES

Awareness of HIV Status and Consistent Condom Use among HIV-infected Couples in Swaziland, Zambia and Zimbabwe

Previous studies have reported increased rates of condom use among HIV discordant couples after couple-centered voluntary counseling and testing interventions. In real world settings, however, HIV testing is usually offered to men and women individually on different occasions, and it is very likely that only one partner has been tested and is aware of his/her test result. This study aimed to examine the association between awareness of HIV status by the husband only versus the wife only and consistent condom use among HIV-concordant and discordant couples in Swaziland, Zambia and Zimbabwe, using the Demographic and Health Surveys (2005-2007) data. Couples were more likely to have used condoms consistently (OR=3.47, 95% CI=1.45-8.34) if the husband was HIV positive and the only one in the couple who had been tested and knew his test result. This association was stronger (OR=5.92, 95% CI=2.23-15.68) if the HIV-positive husband was aware of his test result and his HIV-negative wife aware of her test result. No association was found if the HIV-positive wife was the only one in the couple who knew her test result. Intervention approaches to increase HIV testing among men could help reduce the transmission of HIV infection among couples.

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| Collaborating Countries | Swaziland, Zambia and Zimbabwe |
| Researcher/Project Coordinator | Hmwe Kyu - kyuh@mcmaster.ca Harry Shannon - shannonh@mcmaster.ca Katholiki Georgiades - georgik@mcmaster.ca Michael Boyle - boylem@mcmaster.ca |

Faculty of Health Sciences

DEPARTMENT OF MEDICINE/ DEPARTMENT OF PATHOLOGY AND MOLECULAR MEDICINE

PROJECT CATEGORY: EDUCATION/GLOBAL PARTNERSHIP
MEDICINE/PATHOLOGY AND MOLECULAR MEDICINE

Diagnosis of Sickle Cell Disease in Infants in Uganda

The Red Cell Disorders Laboratory at McMaster University Medical Centre will be hosting a senior laboratory technician from Mulago Hospital for a 6-week intensive training program in the theory and methods of isoelectric focusing and capillary electrophoresis, with an emphasis on interpretation of infant samples.

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| Collaborating Countries | Canada, Uganda |
| Collaborating Institutions | McMaster University Hamilton Regional Laboratory Medicine Program Makerere University, Kampala, Uganda Mulago Hospital, Kampala, Uganda |
| Researcher/Project Coordinator | Madeleine Vehovsek - verhovm@mcmaster.ca Andrew McFarlane - mcfarand@hsc.ca |

DEPARTMENT OF CLINICAL EPIDEMIOLOGY & BIostatISTICS/ DEPARTMENT OF MEDICINE

PROJECT CATEGORY: RESEARCH
CLINICAL EPIDEMIOLOGY & BIostatISTICS/MEDICINE

A large, international, placebo-controlled, factorial trial to assess the impact of low-dose clonidine and low-dose acetyl-salicylic acid (ASA) in patients undergoing noncardiac surgery who are at risk of a perioperative cardiovascular event. PeriOperative ISchemic Evaluation-2 (POISE-2) Trial

Worldwide 200 million adults annually undergo major noncardiac surgery, and 5 million of these patients will suffer a major vascular complication (e.g., vascular death, nonfatal heart attack, nonfatal cardiac arrest, or nonfatal stroke). Despite the magnitude of this problem there are no established safe effective interventions. An international group of investigators have come together to undertake a 10,000 patient perioperative randomized controlled factorial trial to assess the impact of low-dose clonidine versus placebo and low-dose acetyl-salicylic acid (ASA) versus placebo in patients undergoing noncardiac surgery who are at risk of a perioperative vascular event.

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| Collaborating Countries | Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, Colombia, Denmark, France, Germany, Hong Kong, India, Italy, Malaysia, New Zealand, Pakistan, Peru, South Africa, Spain, Switzerland, United Kingdom, United States |
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| Collaborating Institutions | 135 collaborating institutions in 23 countries. |
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| Researcher/Project Coordinator | PJ Devereaux - philipj@mcmaster.ca |
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PROJECT CATEGORY: RESEARCH
CLINICAL EPIDEMIOLOGY & BIostatISTICS/MEDICINE

Management of myocardial injury After NonCardiac surGery (MANAGE) Trial A large, international, randomized, placebo-controlled trial to assess the impact of dabigatran (a direct thrombin inhibitor) and omeprazole (a proton-pump inhibitor) in patients suffering myocardial injury after noncardiac surgery

The MANAGE trial is a placebo-controlled trial of dabigatran and omeprazole (in a partial factorial design among patients not taking a proton-pump inhibitor) designed to evaluate the impact of dabigatran versus placebo on the risk of major vascular complications and omeprazole versus placebo on the risk of gastrointestinal complications in patients who have suffered a myocardial injury after noncardiac surgery (MINS). Eligible patients providing written informed consent are treated with dabigatran 110 mg b.i.d. or matching placebo and omeprazole 20 mg once daily or matching placebo for the duration of the trial (minimum duration of follow-up is 6 months, maximum duration 2 years).

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| Collaborating Countries | Argentina, Australia, Austria, Brazil, Canada, China, Colombia, Denmark, France, Germany, Hong Kong, India, Israel, Italy, Kenya, Netherlands, Nigeria, Peru, Philippines, Poland, Portugal, Russia, South Africa, Spain, Switzerland, Uganda, United Kingdom, United States |
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| Collaborating Institutions | 160 collaborating institutions in 28 countries |
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| Researcher/Project Coordinator | PJ Devereaux - philipj@mcmaster.ca |
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OFFORD CENTRE FOR CHILD STUDIES/ DEPARTMENT OF PSYCHIATRY AND BEHAVIOURAL NEUROSCIENCES/ DEPARTMENT OF PEDIATRICS

PROJECT CATEGORY: RESEARCH AND GLOBAL PARTNERSHIP
OFFORD CENTRE FOR CHILD STUDIES/PYSYCHIATRY AND
BEHAVIOURAL NEUROSCIENCES/PEDIATRICS

CIHR-funded Centre on Research Development in Gender, Mental Health and Violence across the Lifespan (PreVAiL)

PreVAiL, which stands for Preventing Violence Across the Lifespan, is an international research collaboration of over 60 researchers and partners from Canada, the US, the UK, Asia, Europe and Australia, funded by the Canadian Institutes of Health Research's Institute for Gender and Health (2009-2014). Our goal is to bring together researchers and decision-maker partners to produce and share knowledge that will help children, women and men exposed to child maltreatment and intimate partner violence (IPV).

PreVAiL has three main objectives:

1. to increase knowledge about the links between mental health impairment, gender and exposure to child maltreatment and IPV, both in Canada and internationally;
2. to develop interventions to prevent or reduce child maltreatment, IPV and related mental health problems; and
3. to develop and use proven methods of knowledge translation and exchange to ensure that our research findings reach those who make decisions in these areas.

Collaborating Countries Canada, Australia, Denmark, India, Norway, Switzerland, UK, US

Collaborating Institutions McMaster University, University of Toronto, Western University, University of Melbourne, West Virginia University

Researcher/Project Coordinator **Nominated PI:** Harriet MacMillan - macmilnh@mcmaster.ca
Other McMaster researchers: Michael Boyle - boylem@mcmaster.ca , Kathy Georgiades - georgik@mcmaster.ca
Andrea Gonzalez - gonzal@mcmaster.ca, Susan Jack - jacksm@mcmaster.ca , Louis Schmidt - schmidt@mcmaster.ca

DEPARTMENT OF PEDIATRICS/ DEPARTMENT OF MEDICINE

PROJECT CATEGORY: EDUCATION
PEDIATRICS/MEDICINE

Teaching “ICF and Disability”

Knowledge Transfer about use of the International Classification of Functioning, Disability and Health to students and researchers at the MSH.

Collaborating Countries Germany

Collaborating Institutions MSH Medical School Hamburg – University of Applied Sciences and Medical University

Researcher/Project Coordinator Olaf Kraus de Camargo - krausdc@mcmaster.ca

DEPARTMENT OF ENGLISH AND CULTURAL STUDIES/SCHOOL OF THE ARTS

PROJECT CATEGORY: RESEARCH
ENGLISH AND CULTURAL STUDIES/SCHOOL OF THE ARTS

Embodied Politics in Visual Autobiography

The manuscript of this co-edited collection of essays has received 3 very positive external reviews. The co-edited book is forthcoming from University of Toronto Press in 2014.

Collaborating Countries Canada, US, Germany

Collaborating Institutions Carleton
Columbia
OCAD
York University
University of Regina
University of Alberta
Queen's University
University of Toronto
Oberlin College
Concordia
Center for Literary and Cultural Research (ZfL) Berlin

Researcher/Project Coordinator Sarah Brophy - brophys@mcmaster.ca
Janice Hladki - hladkj@mcmaster.ca

PROJECT CATEGORY: RESEARCH/EDUCATION
ENGLISH AND CULTURAL STUDIES/SCHOOL OF THE ARTS

Health, Embodiment, and Visual Culture

This project mounted an international, SSHRC-funded conference, with 3 keynote speakers and 130 delegates. Themes included: Technologies, Cultural Production, Disability, and Affect. Selected papers from the conference have been published in a double special issue of *The Review of Education, Pedagogy, and Cultural Studies* (2012).

Collaborating Countries Canada, US, Finland

Collaborating Institutions George Washington University
UC San Diego
University of Toronto
University of Alberta
Athabasca University
University of Florida
University of Connecticut
University of Wisconsin-Madison
University of Windsor
Louisiana State-Shreveport
Helsinki Collegium for Advanced Studies
Northwestern University

Researcher/Project Coordinator Sarah Brophy - brophys@mcmaster.ca
Janice Hladki - hladkj@mcmaster.ca

PROJECT CATEGORY: RESEARCH/EDUCATION
ENGLISH AND CULTURAL STUDIES/SCHOOL OF THE ARTS

"Scrapes: Unruly Embodiments in Video Art" (Co-Curated Art Exhibition)

-Brophy and Hladki researched contemporary video art and co-curated this art exhibition featuring works by Indigenous artists and artists based in Australia, Canada, and the United States.
-The researchers developed the exhibition brochure including the co-curators' essay.
-The exhibition was a centrepiece for the international peer-review conference organized by the researchers, "Health, Embodiment, and Visual Culture: Engaging Publics and Pedagogies".
-Class visits and tours to the exhibition.
-Rebecca Belmore, an internationally recognized Indigenous artist, provided an artist talk, which the researchers organized.
-3600 visitors

Collaborating Countries Australia, Canada, US

Collaborating Institutions -McMaster Museum of Art
-Vtape (centre for media works by artists)
-Canadian Filmmakers Distribution Centre
-OCAD University
-University of Toronto
-York University
-University of Richmond
-Syracuse University
-Theatre of Speed (Australia)

Researcher/Project Coordinator Sarah Brophy - brophys@mcmaster.ca
Janice Hladki - hladkj@mcmaster.ca

DEPARTMENT OF HISTORY / CENTRE FOR PEACE STUDIES

PROJECT CATEGORY: RESEARCH/GLOBAL PARTNERSHIP
HISTORY/ PEACE STUDIES

"Nation, Minorities and Human Rights in the Conflicted State"

This project examines the impact of the constitutional human rights guarantees on the de facto protection of minority rights in the conflicted and post-conflict states and societies. Focusing on post-conflict states in Europe and Africa, it seeks a comparative study of the constitutional frameworks for minority rights protection in related contexts. It offers an interpretative history of minority rights protection in the modern state by examining case studies within their relevant national settings.

Collaborating Countries Canada, South Africa, Bosnia Herzegovina, Nigeria, Ghana, Sierra Leone

Faculty of Humanities

Collaborating Institutions McMaster University – Canada;
University of Sarajevo – Bosnia Herzegovina;
University of Johannesburg – South Africa;
University of Ife – Nigeria;
University of Lagos - Nigeria

Researcher/Project Coordinator Bonny Ibhawoh - ibhawoh@mcmaster.ca

Researcher/Project Coordinator Larry E. Roberts - roberts@mcmaster.ca
Ian C. Bruce - ibruce@ieee.org
Laurel J. Trainor - ljt@mcmaster.ca
Steven Brown - stebro@mcmaster.ca

Faculty of Science/Faculty of Engineering

DEPARTMENT OF PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR/ DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING

PROJECT CATEGORY: EDUCATION/RESEARCH
PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR/ELECTRICAL &
COMPUTER ENGINEERING

ERASMUS MUNDUS Student Exchange Network in Auditory Cognitive Neuroscience European Union Training and Exchange Network

The program provides financial awards to graduate students, postdoctoral scholars, research staff and faculty for exchanges between partner institutions in Europe and North America that are involved in auditory cognitive neuroscience research.

Collaborating Countries Canada; Finland; France; Germany;
United Kingdom; USA

Collaborating Institutions McMaster University, CANADA
McGill University, CANADA
University of Montréal, CANADA
University of Toronto, CANADA
New York University, USA
University of Minnesota, USA
University of Leipzig, GERMANY
Max Planck Institute for Human Cognitive
and Brain Science, Leipzig, GERMANY
University of Newcastle, UK
University of Glasgow, UK
University of Nottingham, UK
University of Helsinki, FINLAND
University of Lyon 1, FRANCE
École Normale Supérieure, Paris,
FRANCE

SCHOOL OF LABOUR STUDIES/ DEPARTMENT OF SOCIAL WORK

PROJECT CATEGORY: RESEARCH
LABOUR STUDIES/SOCIAL WORK

Convergence and Particularity: International Comparisons of The Nonprofit Social Services

This study explores the ways that the nonprofit social services are being restructured in four countries with fairly similar approaches to social services, namely Canada, Australia, Scotland and New Zealand. We are interested in changing ideas about how society should and does take care of those in need of support and care and the ways that these ideas get translated into funding levels, agency structures and ways of managing, working in and receiving services. We are also interested in the ways that changes are experienced by those providing the services, namely front-line workers and managers. We draw on front-line experiences to theorize on many levels (the changing welfare state, divisions between paid and unpaid care, shifting gender roles, increasingly mobile and diverse workforces) and to develop recommendations for agencies, policy makers, workers and service users. Our initial findings show an increase in workplace violence, unpaid work, and precarious forms of work as well as innovative community and union strategies.

Collaborating Countries Australia, Scotland

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| Researcher/Project Coordinator | Donna Baines, Principal Applicant - bainesd@mcmaster.ca |
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DEPARTMENT OF HEALTH, AGING & SOCIETY/ GILBREA CENTRE FOR STUDIES IN AGING

PROJECT CATEGORY: RESEARCH
HEALTH, AGING & SOCIETY/GILBREA CENTRE FOR STUDIES IN AGING

Contemporary Issues in Critical Gerontology: An International Initiative

This is a network of scholars interested in critical perspectives to the study of aging. The group was initiated under an International Opportunities Fund of the Social Sciences and Humanities Research Council (SSHRC) grant in 2009 and continues as a network/group. Activities have included: network meetings, joint publications, collective symposia at major conferences in Gerontology.

Collaborating Countries Netherlands, Canada, UK, Ireland, Sweden, Australia, USA, France

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| Collaborating Institutions | McGill, UQAM, Galway, Keele, Manchester, Trent, Western, Utrecht, Uppsala. |
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| Researcher/Project Coordinator | Amanda Grenier - grenier@mcmaster.ca |
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DEPARTMENT OF POLITICAL SCIENCE/ INSTITUTE ON GLOBALIZATION AND THE HUMAN CONDITION

PROJECT CATEGORY: RESEARCH/EDUCATION/GLOBAL PARTNERSHIP
POLITICAL SCIENCE/GLOBALIZATION AND THE HUMAN CONDITION

Global Political Economy: Evolution and Dynamics

Ongoing monitoring and analysis of the dynamics of the global political economy.

Collaborating Countries Australia

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| Collaborating Institutions | University of New South Wales |
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| Researcher/Project Coordinator | Robert O'Brien - obrienr@mcmaster.ca |
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PROJECT CATEGORY: RESEARCH/GLOBAL PARTNERSHIP
POLITICAL SCIENCE/GLOBALIZATION AND THE HUMAN CONDITION

Global Labour Futures

Investigation into models for alternative global labour futures.

Collaborating Countries Australia, South Africa

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| Collaborating Institutions | Chris Hani Institute (South Africa) University of Witwatersrand University of Western Australia University of Nottingham |
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| Researcher/Project Coordinator | Robert O'Brien - obrienr@mcmaster.ca |
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PROJECT CATEGORY: RESEARCH/GLOBAL PARTNERSHIP
POLITICAL SCIENCE/GLOBALIZATION AND THE HUMAN CONDITION

Labour Internationalism

An study of the possibilities for, and limits to, labour internationalism.

Collaborating Countries Australia, Brazil, India, South Africa, South Korea, Thailand

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| Collaborating Institutions | University of Witwatersrand University of Western Australia Southern Initiative on Globalization and Trade Union Rights |
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| Researcher/Project Coordinator | Robert O'Brien - obrienr@mcmaster.ca |
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PROJECT CATEGORY: RESEARCH/EDUCATION/GLOBAL PARTNERSHIP
POLITICAL SCIENCE/GLOBALIZATION AND THE HUMAN CONDITION

Global Labour Journal

Managing an international online open access journal on global labour issues.

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| Collaborating Countries | South Africa |
| Collaborating Institutions | University of Witwatersrand |
| Researcher/Project Coordinator | Robert O'Brien - obrienr@mcmaster.ca |

PROJECT CATEGORY: RESEARCH/EDUCATION
POLITICAL SCIENCE/GLOBALIZATION AND THE HUMAN CONDITION

Global Social Policy / Global Labour Policy

Survey of global social policy with a particular emphasis on labour.

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| Collaborating Countries | United Kingdom |
| Collaborating Institutions | Open University |
| Researcher/Project Coordinator | Robert O'Brien - obrienr@mcmaster.ca |

PROJECT CATEGORY: RESEARCH
POLITICAL SCIENCE/GLOBALIZATION AND THE HUMAN CONDITION

Labour, The IMF and the World Bank

An investigation into the relationship between organized labour and two international financial institutions – the World Bank and the International Monetary Fund. Part of a larger project on global social policy.

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| Collaborating Countries | Croatia, United Kingdom |
| Collaborating Institutions | Institute of Economics, Zagreb University of Sheffield |
| Researcher/Project Coordinator | Robert O'Brien - obrienr@mcmaster.ca |

SCHOOL OF SOCIAL WORK/ INSTITUTE ON GLOBALIZATION AND THE HUMAN CONDITION

PROJECT CATEGORY: RESEARCH
SOCIAL WORK/GLOBALIZATION AND THE HUMAN CONDITION

Living in 'transnational spaces': Gendered vulnerability to HIV of Chinese immigrants in Canada and the implications for future interventions"

This CIHR-funded project (2011-2015) aims to understand the specific vulnerability to HIV faced by the current generation of Chinese immigrants in a transnational context. Specifically, this study has three main objectives: a) to understand how such "transnational spaces" have had differential impacts on Chinese immigrant men and women's exposure to HIV risk and their capacity to respond to such risk; b) to compare the ways in which HIV/AIDS related responses, such as knowledge construction, education, service delivery, involvement of civil society organizations (CSOs), and policy-making, have taken account of these gender differences, both in Canada and China; and c) to explore the implications of transnationalism and globalization on HIV interventions, health equity, and gender equity. The findings will help develop more responsive education programs, services and policies that take account of the transnational spaces and lay a foundation for strengthening future global health collaborations and governance.

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| Collaborating Countries | China (and France) |
| Collaborating Institutions | University of Waterloo, Canada Dalhousie University, Canada Renmin University, Beijing, China East China Normal University, Shanghai, China French Institute for Development Research, France |
| Researcher/Project Coordinator | Y. Rachel Zhou - zhoura@mcmaster.ca Roy Cain - cainr@mcmaster.ca Christina Sinding - sinding@mcmaster.ca |

Faculty of Social Sciences

SCHOOL OF LABOUR STUDIES/ DEPARTMENT OF POLITICAL SCIENCE

PROJECT CATEGORY: RESEARCH
LABOUR STUDIES/POLITICAL SCIENCE

Impacts of Seasonal Agricultural Worker Program on the Family Cohesion of Workers from Mexico and Jamaica

This project analyses impacts of repeated migration of workers to Southern Ontario Canada on their families in Mexico and Jamaica. The project centres on interviews with workers, spouses, adult children, school teachers, and social workers in Mexico and Jamaica. The project is designed to produce evidence based research relevant to changes in public policy related to transnational families under the Seasonal Agricultural Workers Program of Canada.

| | |
|---------------------------------------|--|
| Collaborating Countries | Mexico, Jamaica |
| Collaborating Institutions | Peel Region United Way; International Migration Centre, Laurier University; School of Labour Studies, McMaster; UNAM, Mexico; Development Options, Jamaica |
| Researcher/Project Coordinator | Don Wells- wellsd@mcmaster.ca Wayne Lewchuk- lewchuk@mcmaster.ca |

Faculty of Health Sciences/ Faculty of Humanities/ Faculty of Social Sciences/ DeGroot School of Business

GLOBAL HEALTH

PROJECT CATEGORY: EDUCATION/GLOBAL PARTNERSHIP
GLOBAL HEALTH

Preparing the Global Workforce: Master of Science in Global Health

Launched in 2010 to address emerging challenges in globalization and health, the Master of Science in Global Health is a real-time collaborative learning program. It brings together faculties of social sciences, health sciences, business and humanities, and links with partner universities in Thailand and India for a truly international experience.

The innovative curriculum places students in virtual, transcontinental learning pods to gain experience working with peers and tutors across different locations, cultures and backgrounds. Students also have the opportunity to specialize in a selected field of interest. The program culminates in a simulated international symposium in India where students are immediately faced with real-life challenges. The 12-month program fosters collaboration, self-management, cross-cultural intuition, and incisive decision-making – practical skills required for leadership careers within key international health organizations, government and non-government agencies, and the private sector.

| | |
|---------------------------------------|--|
| Collaborating Countries | India, Netherlands, Thailand |
| Collaborating Institutions | Maastricht University, Manipal University, Thammasat University |
| Researcher/Project Coordinator | Andrea Baumann - baumanna@mcmaster.ca |



Appendices



APPENDIX A

ACKNOWLEDGEMENTS

INTERNATIONALIZATION TASK FORCE MEMBERSHIP

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Engineering

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Health Sciences

Dr. James King,

Humanities

Dr. Matheus Grasselli,

Science

Dr. Robert O'Brien,

Social Sciences

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Engineering

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DeGroote School of Business

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Faculty of Engineering

Dr. John Kelton

Faculty of Health Sciences

Dr. Ken Cruikshank

Faculty of Humanities

Dr. Robert Baker

Faculty of Science

Dr. Charlotte Yates

Faculty of Social Sciences

INTERNATIONAL COLLABORATIVE PROJECT TEMPLATE

INTERNATIONAL COLLABORATIVE PROJECT TEMPLATE

**Please complete the following template for every international project submission (2009-2013) & send to hoorenm@mcmaster.ca no later than May 31, 2013.*

| | |
|---|--|
| 1. Faculty Name <i>Business, Engineering, Health Sciences, Humanities, Science, Social Sciences</i> | |
| 2. Department/School Name | |
| 3. McMaster University Researcher(s)/ Project Coordinator(s) <i>Name, email address</i> | |
| 4. Project Title | |
| 5. Project Category <i>Research/ Education/ Global Partnership</i> | |
| 6. Collaborating Countries | |
| 7. Collaborating Institutions | |
| 8. Collaborative Team work <i>List involvement (if any), of other faculties, staff, postdoctoral fellows, graduate and undergraduate students</i> | |
| 9. Scope of Project/ Description | |

LETTER TO MCMASTER FACULTY (CHAIRS, DEANS, DIRECTORS)



May 2, 2013

Dear McMaster University Faculty,

To highlight and promote internationalization and global engagement at McMaster University and in keeping with "Forward with Integrity: The Emerging Landscape," we are requesting your assistance in compiling an inventory of international activities from 2009 to 2013.

The McMaster University International Compendium (2013) is intended to achieve the following:

1. Showcase McMaster's partnerships with institutions worldwide through international activities;
2. Stimulate internal cross-collaboration between departments and faculties;
3. Promote capacity building for higher education at an international level;
4. Foster advancement of internationalization at McMaster; and
5. Encourage and support new initiatives.

To ensure all international activities are included in the compendium, please forward the attached template (*international collaborative project template*) to all faculty members within your department for completion. Please use one template for each international activity. Completed forms may be submitted to hoorenm@mcmaster.ca by **May 31, 2013**.

We look forward to working with you on this important University initiative, which fosters global citizenry and awareness among students, faculty and staff. Thank you in advance for your cooperation. Questions and concerns may be directed to the Global Health Office at hoorenm@mcmaster.ca.

Sincerely,

Dr. Patrick Deane
President & Vice Chancellor

Dr. Andrea Baumann
Associate Vice-President, Global Health
Member, Internationalization Task Force

GLOBAL HEALTH OFFICE
McMaster University,
Faculty of Health Sciences

1200 Main St. West
Michael G. DeGroote Centre
for Learning and Discovery Room 2500

Hamilton Ontario, Canada, L8N 3Z5
Telephone: 905-525-9143 ext. 22541
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This document was completed in September, 2014,
by Dr. Andrea Baumann, Associate Vice-President,
Faculty of Health Sciences, Global Health.

For more information please contact baumanna@mcmaster.ca.