



Annual Progress Report Submitted June 2023:

Introduction

The MicroResearch (MR) vision is to train, mentor, and support multidisciplinary community focused health research teams to improve health outcomes in low-income countries and in communities in Canada. MR nurtures a culture of inquiry to identify and solve local problems and drive change for better health. To accomplish all these goals, MR conducts workshops to train community members and health professionals on community health research methods and skills. The process “democratizes” the potential of research, illustrating that it is not just for academics. MR supports participants in choosing a research question that they feel is most important to their local needs. Participants use local knowledge and the learned research methods and skills to address their question, taking into consideration the context, culture and resources they have available. In this way research is “decolonized” from historic colonial and local hierarchical barriers.

MicroResearch International and MicroResearch Canada progress 2008-2023



This report summarizes MR activity from April 2022 to March 2023. For more information, visit the website at: <http://www.microresearch-international.ca/>.



Virtual Workshop for Halifax, NS – June, 2022



Virtual Workshop for Meru, Kenya – February, 2023

MicroResearch Tools

MR Research Skills Workshops: These workshops are the core of the MicroResearch process and have traditionally been conducted at the participants’ local institution. Since the pandemic began, the 40-hour MR Research Skills Workshops have been delivered virtually. Over the two-week workshop, participants are taught the basics of research skills while actively working in teams on their own research proposal. Workshop lectures cover the research processes needed, including factors to consider in choosing a

research question, research methods, ethics, community engagement, knowledge translation, research budgeting etc. On the final day of the workshop, teams present their research proposal overviews and receive initial feedback from a panel of local judges. The judges determine whether the team's question and research plan outline is worthy of developing into a full proposal submission for a MR grant. The opportunity to travel to MR sites in the next year will heighten the bond between MR teams and their mentors during face-to-face meetings.

Train the Trainer (TtT) Workshops: When workshops are done in-person, the MR facilitators can work directly with local leaders to organize the Research Skills Workshop and train the coaches and co-teachers. In the absence of this face-to-face communication during COVID, we have offered "Train the Trainer" Virtual Workshops that provide an overview of the MR program and the Research Skills Workshop, outlining the various roles teachers and coaches need to play. A benefit of holding these training sessions virtually has been the option of inviting guests to attend from Canada and elsewhere. Guests attending these sessions may, in the future, fill roles as coaches, co-teachers, and reviewers for MR International and MR Canada. Getting more people involved in MR in Canada is integral in building the foundation of sustainability for the program going forward. Three TtT Workshops were held over the past year, two for new sites in Kenya and one for the first MR site in Ghana.

Writing Skills Workshops: MR has always considered new types of workshops to address the changing needs of the people we work with. The MR Writing Skills Workshop arose from requests of MR graduates. These 3-day mini-workshops are intended for participants who have research data that have been analyzed so they are now at the writing stage. In the workshop, participants identify the "gold nugget" of their findings and then, supported by a coach and other participants, develop the backbone outline for their paper. As more MR projects in Nova Scotia are completed, this will become a much-needed workshop to bring to Canada. Plans for the next international virtual Writing Workshop are being made for the late fall.

Knowledge Translation Workshops: MR graduates have asked for support and training on knowledge translation. Currently, MR teams are encouraged to apply for additional funding from MR to support their KT plans, but many teams need guidance in developing a targeted KT strategy for disseminating their findings to key stakeholders, the community, and beyond. MR KT Workshops are in the development stage and will follow a similar format as the MR Writing Workshops, in that they will be condensed sessions with hands-on learning intended for groups who have already collected and analyzed their data and are ready to disseminate their findings.

Forums: MR Forums in Africa allow MR participants to connect with researchers with similar interests from other institutions and countries. With grant support from the Royal College's International Development Aid Collaboration (IDAC), two MR Forums were held virtually in 2021 and 2022. Each of these forums were attended by over 70 MR graduates, site leaders, and volunteers from Uganda, Kenya, Tanzania, Rwanda, Malawi, and Canada, with select MR teams presenting their research findings. The Forum in 2021 featured panel discussions on research ethics, research education, and knowledge translation, while 2022 focused on digital storytelling, networking, and the democratization and decolonization of community health research. Through the sharing of research findings, past Forums have led to the formation of several topic-specific MR networks where researchers were able to share ideas and collaborate. As a result of the Forum, networks are meeting virtually to discuss ongoing research and potential new projects. The next MR Forum will be held virtually June 19 - 21, 2023. The two themes chosen by MR African site leaders will be "Climate change: Impact of the environment on health" and "The Potential impact of Universal Primary Healthcare".

MicroResearch in Undergraduate Education: Not only has MR been active in postgraduate education (for instance at Kabarak University in Kenya, where workshops are tailored to postgraduate students working on theses), but it also has been integrated into the training of undergraduate health professionals at Mbarara University of Science and Technology. For more information see Wakida EK, et al. Perceptions of Undergraduates and Mentors on the Appropriateness, Acceptability, and Feasibility of the HEPI-TUITAH Micro-Research Approach to HIV Training in Uganda: DOI:10.2147/AMEP.S359777.

MicroResearch in Elementary Schools: After being asked on numerous occasions how to bring MicroResearch into primary and secondary education, the first “MicroResearch in Schools” project was launched at St. Mary’s Elementary School in St. John’s, NL for a grade 6 class. Working with liaisons at Memorial University, the grade 6 teacher, and the school principal, an age appropriate version of the MR workshop was implemented within the curriculum. This pilot program was a trial to show the potential of a MR approach within school curriculums.

Activity April 2022 – March 2023

Workshops:

- Halifax, NS: Virtual MicroResearch Workshop, May 24 – June 3, 2022 (6 participants)
- Meru University of Science and Technology, Kenya: Virtual Train the Trainer Workshop September 20, 21, and 23, 2022 (6 participants)
- Kabarak University, Kenya: Virtual Thesis Workshop for post-graduate students, October 24 – November 4, 2022 (19 participants)
- Meru University of Science and Technology, Kenya: Virtual Research Skills Workshop, January 9 – 20, 2023 (33 participants)
- Korle-Bu Teaching Hospital, Ghana: Virtual Train the Trainer Workshop, January 18, 19 & 27, 2023 (13 participants)
- Mbarara University of Science and Technology, Uganda: Virtual Research Skills Workshop, February 20 - March 3, 2023 (29 participants)
- Virtual Train the Trainer Workshop, April 11 – 13, 2023 (35-45 participants joining each day from multiple sites, including Kisii University in Kenya, Mildmay Uganda, Kenya Medical Training College in Kenya)
- St Mary’s Elementary School Grade 6 Class: MicroResearch in Schools September, 2022 – June 2023 – Grade 6 (21 participants)

Conferences and Presentations

- Meru, Kenya: MicroResearch – Towards sustainable health research, during uncertain times. Virtual presentation by Bob Bortolussi: June, 2022.
- Nairobi, Kenya: MicroResearch – Towards sustainable health research, during uncertain times. Virtual webinar for Kenyan Medical Training College presented by Bob Bortolussi and Noni MacDonald: August, 2022.
- Toronto, ON: Toward inclusive global health research: Decolonizing and democratizing community health research. Presentation at the Canadian Conference on Global Health by Bob Bortolussi and Noni MacDonald. November, 2022
- Toronto, ON: Impact of MicroResearch on attitudes and careers of local participants and coaches. Virtual presentation by Sage Dixon. November, 2022.

- Halifax, NS: MicroResearch: Decolonizing and democratizing community focused research. Virtual presentation for the Maritime SPOR Support Unit's Keeping up with KT Webinar Series by Noni MacDonald and Melissa Rankin. January, 2023.
- Saskatoon, SK: MicroResearch: Decolonizing and democratizing community focused research. Virtual presentation by Noni MacDonald for University of Saskatchewan Faculty of Medicine. April, 2023.

MR Project Updates:

Financial support for research projects launched in the past year have come from several sources including, Rotary Clubs in Nova Scotia and Prince Edward Island, Dalhousie Medical Research Foundation, and the QEII Health Sciences Centre Foundation. During the first wave of the pandemic, many MR teams put their research on hold due to work commitments and COVID gathering constraints, which precluded data collection methods for some. However, as the pandemic continued, many teams shifted their methods to be able to carry on with their projects. This included strategies such as conducting interviews over the phone, rather than in person, and holding team meetings virtually. To download a summary of MR International projects, visit <http://www.microresearch.ca/projects>. For MR-NS projects, visit http://www.microresearch-international.ca/ns_projects.html.

Despite the many obstacles posed by the pandemic, MR teams and the MR program have reached success by presenting research they have conducted and publishing their findings so that others can gain from the new knowledge. Recent publications from completed MR projects as well as publications on the MR program more generally include:

- Wakida EK, Rukundo GZ, Atuhaire C, Karungi CK, Kumakech E, Haberer JE, Talib ZM, Obua C. Perceptions of Undergraduates and Mentors on the Appropriateness, Acceptability, and Feasibility of the HEPI-TUITAH Micro-Research Approach to HIV Training in Uganda. *Advances in Medical Education and Practice*. 2022 Apr 15;13:323-35. DOI:10.2147/AMEP.S359777
- Vivalya BM, Vagheni MM, Piripiri AL, Masuka RK, Omba AN, Mankubu AN, Andjafono DO, Kitoko GM. Prevalence and factors associated with relapse and long hospital stay among adult psychiatric patients with a history of childhood trauma. *Psychiatry Research*. 2022 Jul 26;114745. DOI: 10.1016/j.psychres.2022.114745
- MacDonald NE, Bortolussi R, Kabakyenga J. A long-term process for decolonizing and democratizing community-focused research: the case for MicroResearch in East Africa and in Canada. *Canadian Journal of Public Health*. 2022 Aug 18;1-5. DOI: 10.17269/s41997-022-00680-2
- Gafaranga JP, Manirakiza F, Ndagijimana E, Ulimubabo JC, Karenzi DI, Muhawenayo E, Gashugi P, Nyirasebura D, Rugwizangoga B. Knowledge, Barriers, and Motivators to Cervical Cancer Screening in Rwanda: a Qualitative Study. *International Journal of Women's Health*. 2022 Sept 14: 1191-1200. DOI: 10.2147/IJWH.S374487
- Kanyesigye, H., Kabakyenga, J., Mulogo, E. et al. Improved maternal–fetal outcomes among emergency obstetric referrals following phone call communication at a teaching hospital in south western Uganda: a quasi-experimental study. *BMC Pregnancy Childbirth* 22, 684 (2022). DOI: 10.1186/s12884-022-05007-0
- Mukama Semei, C., Nakubulwa, S., Nyirabega, E., Mugabe, P., et al Predictors of access to sexual and reproductive health services by urban refugees in Kampala City, Uganda. *International Journal of Women's Health Care*, 7(3), 131-139. DOI: 10.21203/rs.3.rs-783459/v1
- Taremwa IM, Ashaba S, Naggayi BRK, Kayongo B, Nimwesiga C, Ayebazibwe C, Tumuhimbse M, Frank J. Psychosocial Challenges of the Coronavirus Disease-2019 Pandemic Among Frontline Health Care Providers and Their Coping Mechanisms at Mbarara Regional Referral Hospital, Southwestern

Plans for the Future

Given the success of MR's international and Canadian workshops, new virtual and in-person workshops are planned for 2023-2024. Justification for these ventures and anticipated schedule include:

International Workshops:

The Millennium Development Goals (MDGs), set by the UN and WHO to improve global health by 2015, has been seen as an enormous success in much of the world. However, Africa fell short of these goals and has been challenged to meet the Sustainable Development Goals (SDGs, 2015-2030), which envisioned a world where *"no one is left behind"*. Given the economic challenges presented by COVID, the World Bank estimates that contributions from wealthy nations will fall far short of previous levels, thus poorer countries may be left further behind. MR is a social innovation that decolonizes and democratizes community focused research, enabling local health workers and their communities to find solutions to local problems that can lead to improved health, well-being, and economic prosperity. This initiative supports strategies to help achieve the SDGs from the local community upward.

Upcoming International Initiatives:

- Kisii University, Kenya – Virtual Research Skills Workshop scheduled for fall 2023
- Korle-Bu Teaching Hospital, Ghana – Research Skills Workshop scheduled for fall 2023 to be held in-person in Accra, Ghana
- Kenya Medical Training College, Kenya – Research Skills Workshop scheduled for fall 2023 to be held in-person in Nairobi, Kenya
- Kabarak University, Kenya – Research Skills Workshop for postgraduate students and medical residents. Date TBD, likely fall 2023
- Mbarara University of Science and Technology, Uganda – Date TBD, likely February, 2024
- ASSA in Tamil Nadu, India – Physiotherapists at a rehab centre hope to increase research capacity. The Indian team has participated in a TtT. Date TBD likely 2024

Canada - Indigenous Communities Workshops:

The Truth and Reconciliation Report from 2015 exposed past failures of Canadians and governments to measure up to promises made to Indigenous people of Canada. Canada is trying to improve on its promises and develop a new spirit to "decolonize" its partnership relationships. This will require shared decision-making. MR provides an ideal framework in terms of finding solutions to local health problems with local community members leading the work – rather than from outside academics. While MR has had a number of indigenous participants in MR NS workshops, we have not yet been invited by a First Nation community to run a local workshop. However, the MR program has recently been invited to facilitate workshops in Newfoundland and Labrador and Nova Scotia, an important first step in developing an ongoing relationship. There has also been discussion around a MR workshop for Indigenous communities in Saskatchewan and in Northern British Columbia.

MR is also exploring the potential of MR Camps for Indigenous youth for summer 2024. Early discussions have been had with connections in NS, NL, and BC on possibilities, including working with innovation leaders for support and help with funding.

Upcoming MicroResearch Indigenous Workshops

- Flat Bay Mi'kmaq Band, Newfoundland and Labrador – In-person Research Skills Workshop scheduled for January 2024

Canada - First Responder Organizations:

MR Canada has a longstanding relationship with first responders, police and correctional organizations, with several members participating in MR workshops in Nova Scotia, identifying challenges and opportunities to improve outcomes in the communities they serve. The need to “democratize” the decision process among police organizations was highlighted in the recent inquiry from the Mass Casualty Commission in Nova Scotia, as the highly centralized structure of the RCMP was identified as a problem. One step to improve on this is to train and coach its members to identify problems and explore solutions to take initiative. MR has had success with police organizations and has been invited to help in this new process. Initial talks are being held to hold a MR workshop for the RCMP in 2024. Similarly, MR has been invited to organize a MR workshop for paramedics in the Ottawa region, tentatively scheduled for November, 2023.

National MR Accreditation

While MR NS workshops are accredited by the College of Family Medicine and the Royal College of Physicians and Surgeons (RCPS) through Dalhousie University Faculty of Medicine’s Continuing Medical Education program, only workshops given within Nova Scotia qualify for accreditation. The virtual MR program has highlighted the need to obtain national accreditation in order to offer credit hours to MDs participating in other provinces. The MR team has been in discussion with RCPS is to apply for accreditation directly at the national level for 40 Section 1 credits for the MR Workshop. This will simplify the issues of accreditation for those who participate from outside Nova Scotia. The College of Nursing in NS has recognized these credits for their nurses, so again broader national accreditation will simplify this for nurses in other parts of Canada.

Communications Strategy

With funds from the Royal College of Physicians and Surgeons of Canada, MR was able engage with a communications firm (General Public and Partners) in June 2022. This communications consultation helped us to better define the MR brand architecture and communications strategy both internationally and in Canada, as MR continues to grow and adapt.

The communication strategy will be implemented as we revamp the MR websites - both the public sites and the password-protected curriculum site. The curriculum site will replace the reliance on USB-drives that contained these materials. As a result of the pivot to virtual workshops, access to the materials online and the ability to easily search for and access materials has become more critical. The redesign of the curriculum website has been completed and will be launched in June, 2023. The public sites will be revamped later in 2023, taking into consideration the communications strategy and brand identity from the communications consultation. All of these moves will be critical as MR educational materials are used more widely and as MR gains wider recognition.

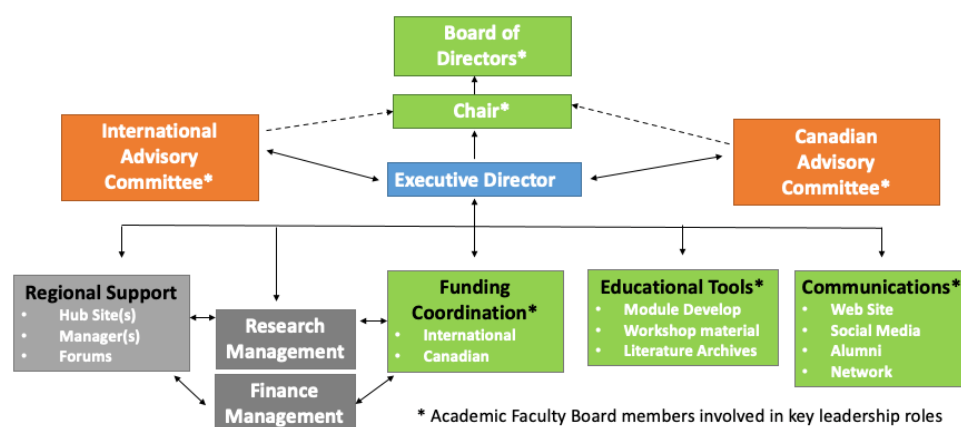
MicroResearch new organizational structure and business plan

Based on discussion emerging from the 2021 “Strategic Doing” exercise and through consultations with the MR Advisory Committees, a new business plan was developed in 2022. This plan included organizational and network charts that reflect the relationships between different actors as the program continues to grow.

There are two major work streams in MR – *Infrastructure* and *Academic* – in which the program leaders need to work in collaboration but have different foci of attention (see MR organizational chart).

- *Infrastructure lead* oversees the MR operations including financial and program management internationally and in Canada. A variety responsibilities are required for successful management:
 - MR workshops: timing, site selection, operational mechanics, support of workshop teachers, coaches, judges and working with sites on participant recruitment
 - Grant proposals for MR Project proposals from LMIC and in Canada; support Grant project review and tracking.
 - MR forum; planning and infrastructure, support of the regional host sites. (iv) Hub Sites(s) develop site SOPs, finance management.
 - MR communications and the MR networks as well
 - Ensuring all workshop materials are kept up to date, workshop evaluations are collated, and workshop reports and annual reports developed
 - Support chair and board members in developing MR proposals to external agencies and partners
- *Academic leads* will require several skillsets for the academic activities, and we envisage several part-time academic faculty participating to meet these needs. Responsibilities include:
 - Recruiting and training MR volunteer teachers, coaches, and reviewers, as well as adjudicating and summarizing the project reviews
 - Ensuring the training modules for the different workshop types are kept up to date, as well as adapted to fit new settings and contexts
 - Developing agenda and educational and research materials for MR Forums and the development of new programs to better serve MR graduates – for example a recent request for a mini knowledge translation workshop that is hands-on, similar to the MR Writing Workshop
 - Ensuring effective communication through internet, social media and academic networks
 - Writing reports and grant proposals to Canadian and International funding sources
- The infrastructure and academic leads need to work closely together on funding applications, annual reports, and communications but need different skillsets and background experiences.
- Members of the Board with appropriate academic skills will play lead roles overseeing financial management (Board Treasurer), funding coordination, educational tool development, and communications.

MicroResearch Organizational Chart



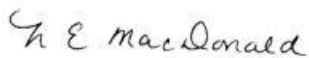
Lessons for 2023 and final comments

The past few years have provided both new challenges and new opportunities for MR. While the pandemic has resulted in many obstacles in conducting workshops and completing research projects, the virtual format has allowed and will continue to allow MR to reach new sites and engage with a wider range of people globally and nationally. However, face-to-face meetings is key to developing strong ties with colleagues. With greater opportunity for travel in the coming year, MicroResearch will be poised to move to the next level of its development.

Acknowledgements:

MicroResearch works with its partners; IWK Health, Nova Scotia Health, Dalhousie University, and Academics Without Borders to develop its plans and future initiatives. MicroResearch is also thankful for the support from our donors. We are particularly indebted to the support in Canada from the Royal College of Physicians and Surgeons of Canada, Rotary Clubs in Nova Scotia and PEI, Memorial University and the Marine Institute, and the Departments of Pediatrics and Obstetrics and Gynecology in the Dalhousie University Faculty of Medicine. In Africa, our collaborators have provided both financial and academic support. In particular we acknowledge support from Healthy Child Uganda, Mildmay Uganda, Kabarak University Department of Family Medicine, the University of Malawi College of Medicine, Meru University of Science and Technology, Kenya Medical Training College, Korle-Bu Teaching Hospital, and Kisii University. Without active involvement from international sites, MR would not be successful.

Respectfully submitted,



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