



**Final Report:
MicroResearch Nova Scotia Virtual Workshop
Halifax, Nova Scotia
May 24 – June 3, 2022**



Participants, facilitators, and coach on the final day of the workshop

Building capacity for community focused health research



Introduction and Background

MicroResearch is an innovative research training program for community members that began in 2008 in Africa under the leadership of Noni MacDonald and Bob Bortolussi of IWK Health in Halifax, NS. Since 2016, the African MicroResearch program has been implemented in communities in Nova Scotia.

Rationale for MicroResearch NS

Nova Scotia rates poorly on many health indicators compared to other provinces, and health care funding is becoming increasingly limited. The gaps in knowledge translation, adaptation, and implementation at the community level are widening and there is a need to better align local resources to improve outcomes at the community level. Continuing to deliver health care – preventive, acute, and chronic – as is currently done, will not bring the changes needed to improve local health outcomes and meet the Nova Scotia Health (NSH) priorities. While the business plans at NSH, IWK Health, and the Nova Scotia Dept. of Health and Wellness all encourage strategies and collaboration to address complex health problems, local health problems need community-focused, locally driven, sustainable, culturally and local resource appropriate solutions. Building on this need, MicroResearch NS (MR-NS) aims to develop local community focused research capacity to find solutions to local health problems deemed important by local participants.

“The goal of MicroResearch is to improve health care outcomes with innovative community based research that assures quality and integration of research into the fabric of the local health system and the community”.

MicroResearch NS Program Model

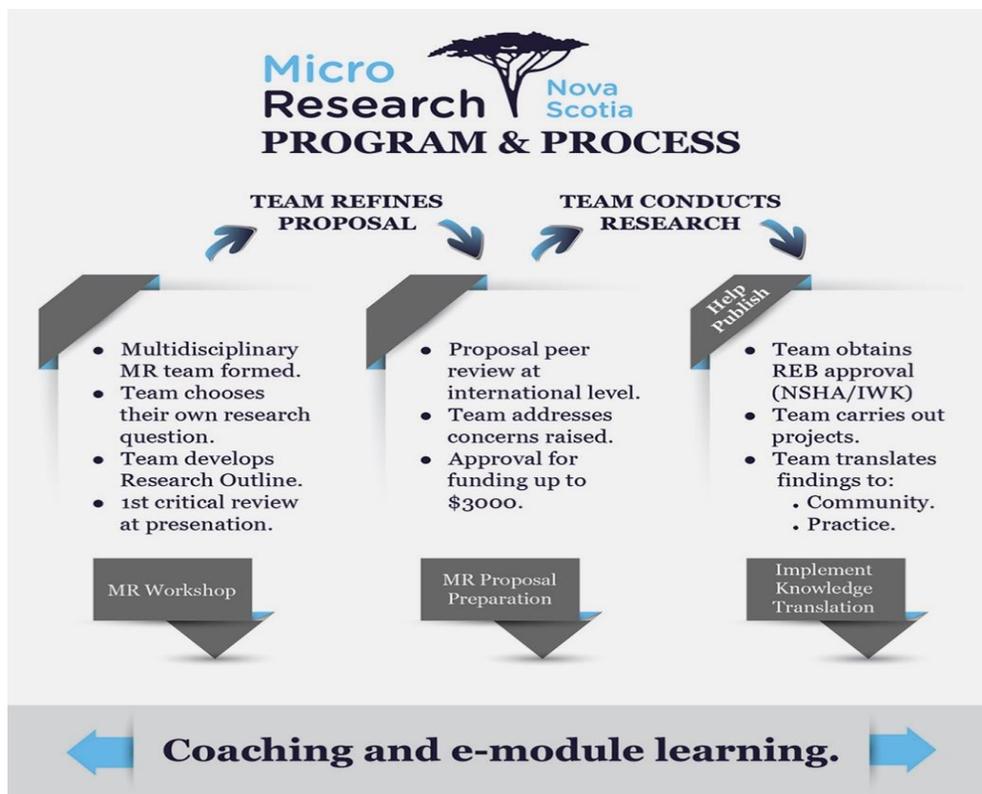
The fundamentals of the MR-NS program include:

Workshops:

- Training – participants are taught practical and applied community focused research skills over 10 half-days
- Proposal Preparation: Interdisciplinary collaboration - teams work together to move a research idea to a fundable proposal
- Seed funding - of up to \$3000 to support quality projects

Implementation:

- Project management – teams work together to carry out the community project
- Knowledge sharing – of research outcomes with stakeholders



See MacDonald et al MicroResearch: Finding sustainable local health solutions in East Africa through small local research studies. *Journal of Epidemiology and Global Health* 2014;4:185–93

Pivot to Virtual Workshop Format

As of 2020, nine in-person MR-NS workshops had been held in Nova Scotia. However, due to the COVID pandemic with its public health gathering restrictions and added pressures and responsibilities on local health care workers, the planned 2020 in person MR-NS workshops were put on hold. The same COVID pressures also impacted the International MR Workshops. Hence a decision was made collaboratively with partners to explore virtual MR Workshops. Several were held internationally - both regular MR training workshops as well as MR writing workshops – with good success, as measured by attendance, participation, proposal or paper overview outputs, and participant evaluations. Two virtual workshops were held in 2021 for sites in Canada, including one in Halifax, NS and one in St. John’s, NL. This was the third virtual workshop through the MicroResearch NS program.

MicroResearch NS Program Accreditation

The MR-NS virtual workshop received accreditation from Dalhousie University Continuing Professional Development, Faculty of Medicine for 40 Category 1 RCPS / CCFM credits. Continuing Professional Development credits can also be garnered by other health professional participants for their continuing education.

MicroResearch NS – September Virtual Workshop

Workshop Facilitators and Coaches

All faculty who facilitated this workshop had research experience and most had MicroResearch teaching experience.

Noni MacDonald , MD, MSC, FRCPC, FCAHS Professor of Pediatrics, IWK Health and Dalhousie University, Halifax, NS noni.macdonald@dal.ca	Bob Bortolussi , MD, FRCPC, FCAHS, Professor Emeritus, Pediatrics, IWK Health and Dalhousie University, Halifax, Canada Robert.bortolussi@dal.ca
Roxanne MacMillan , LIT MLIS AHIP Library Educator, Library Services Nova Scotia Health, Halifax, NS Roxanne.macmillan@nshealth.ca	Rosemary Ricciardelli , PhD Professor of Sociology, Memorial University of Newfoundland, St. John's, NL rricciardell@mun.ca
Jillian Filliter , PhD Assistant Professor of Pediatrics, IWK Health and Dalhousie University, Halifax, NS filliter@dal.ca	

Participants

Building on past experience with recruitment, workshop participants were recruited through personal emails, referrals, and invitations to NSH and IWK health workers, Dalhousie University (particularly the Faculty of Medicine, Faculty of Health, and Faculty of Computer Science), and Immigrant Services Association of Nova Scotia through the International Medical Graduates program.

Tentatively, 9 participants were due to attend, but three had to drop-out due to conflicting work commitments. The final participant count was six, all from the Halifax area with backgrounds in pharmacy, medicine, and research. Four were international medical graduates with links to ISANS. Daily attendance was >90%. Due to the number of attendees and with input from the participants, only one group was formed (See Appendix 1 for the full participant list).

Pre-Workshop Assessment

Six of the six participants filled in the form virtually. The most common reason participants gave for attending the workshop was a variation on: to learn about research/MicroResearch, to meet new people/network and learn other skills. All respondents indicated an interest in community health research, although only 50% had past research experience in any discipline.

Workshop Logistics

All the workshop sessions were held virtually via Zoom with the opportunity following each lecture session for questions and comments either virtually or via the chat function. Each of

the sessions were recorded and posted as an unlisted YouTube video. The group-work portion of each session was also held via Zoom.

Participants were given access to all the workshop materials, including PowerPoint presentations, supplementary documents, and research toolkits ahead of the workshop via Google Docs. During in-person workshops, these resources are typically shared through USB drives.

Workshop Format

The MicroResearch-NS workshops combined interactive seminars, exercises and daily small group interdisciplinary, project development sessions supported by local site coaches. Participants were placed into one group on Day 2 with good spread of background and expertise. One group was chosen as there were only 6 participants.

The daily attendance was very good with five of six or all six attending daily. The virtual format allowed several participants with conflicting responsibilities to easily pop in and out of the sessions. The groups rapidly became a team with excellent daily discourse and regular sharing by email and catch up conversations for those who had to miss a class or had to come late because of conflicting commitments.

Workshop Program Overview:

The typical 10 half-day program was condensed into 9 days to accommodate for the Victoria Day holiday. Having the half-day sessions start at noon and run until 4:00pm worked very well. The virtual program included short breaks in between to limit fatigue.

On Day 2, each participant vigorously discussed the merits of their individual research topic. One area was selected, shaped into a question, and then refined for proposal overview development throughout the workshop. All questions expressed deep commitment to helping to make a difference in the health of this community. Several of the questions were related to a similar topic area.

On Day 3, a team spokesperson presented the list of topics to the facilitators and the team discussed why the final selection was made.

Research Question:

“How do we integrate international medical graduates into Nova Scotia Health Care system?”

The rest of the workshop was devoted to refining their research questions and developing the proposal overviews including background, methods, budget, knowledge translation, and next steps etc. all with the help of the MR coach. Other presentations focused on report writing, manuscript development, creating posters and abstracts as well as how to create a research PPT for the final day.

Final Day: Team Research Proposal Overview Presentation and Judging

The refined research aims/ question presented by the team on the last day of the workshop for adjudication was:

Refined Question: “International Medical Graduates: An Underutilized Resource in Nova Scotia?”

The highlight on the final day of the workshop was the oral presentation describing the team’s proposal overview to answer their research question. The presentations included a 10-minute overview of the team’s research proposal followed by comments and questions from the judges and audience and then constructive suggestions from the other final day attendees on how the proposal might be strengthened.

Judges

Three distinguished judges were invited to adjudicate the presentations:

- Jill Hatchette PhD Psychology, Consulting Scientist, Leader for Education and Ethics, Research Services, IWK Health
- Eileen Denovan-Wright PhD Pharmacology, Associate Dean Research, Faculty of Medicine, Dalhousie University
- Shawna O’Hearn MSc Occupational Therapy, PhD candidate, Director Global Health Office, Faculty of Medicine, Dalhousie University

The judges listened to the presentation, asked questions, and deliberated on whether the project could go forward to be developed into a full MR-NS grant proposal. Their evaluation and scoring system was based on MicroResearch principles.

Judges’ Comments

The judges were very impressed by the importance of the research question to the community and to Nova Scotia and felt it was a particularly timely issue. The proposal was considered novel, compelling and delivered with great passion. They pointed out that the team had an obvious vested interest in the proposed project.

The team was given the green light to go ahead for full proposal development. The judges then offered specific constructive criticisms to both teams post adjudication for strengthening the proposals.

Workshop Assessment

An assessment of the workshop by participants was obtained using structured evaluation forms submitted anonymously. Five of six eligible participants completed the final participant evaluation form. The workshop was well received and highly valued. All of the respondents did emphasize their preference for an in-person workshop over a virtual format.

Team Evaluation

From the viewpoint of the coach and facilitator the group worked well together. In the team evaluation, which five of six participants completed, respondents indicated how respectful team members were of each other's opinions and how collaboratively they worked. However, it should be noted that post-workshop two team members have decided not to continue with the project. The team will need to consider how to bring new team members in. Although it is expected that not all workshop participants will want to continue working with the team afterward, an emphasis on the value of continuing with the project and the commitment it entails should be clear when recruiting future workshop participants.

Outcomes and Recommendations

Administrative Considerations:

1. This virtual MR NS workshop worked well and the time chosen was well accepted. The timing of the workshop to start at noon did not seem to be a barrier and this led to less pressure for finishing. Five minute breaks were given between lectures and the team work was done with the coach by Zoom each day. The format, because the class size was limited, meant participants were actively engaged and asked questions throughout the sessions and discussions did ensue.
2. High level discussion is needed to consider the value and implications of using the virtual format as Zoom worked well. This does allow participants to not be on site and has the potential to broaden the participant reach of MR-NS. However, many participants indicated "Zoom Fatigue" and the value of being able to meet in-person.
3. The optimal size for an online virtual team where participants do not know each other needs further consideration. The six participants with a coach worked well here. Having the team introduce themselves to each other on Day 2 putting forward their skill sets rather than just their discipline proved to be very helpful.
4. The team made use of Slack to communicate with each other outside of the workshop. This was preferred over email to ensure quick response and more active communication. This could be encouraged as a tool for future workshops, both virtual and in-person.
5. This program had three guest lecturers. This was very helpful as having one facilitator do two lectures in a row is demanding.
6. One concern raised involves how to optimize participants from ISANS beyond IMGs, i.e. in past have had international nurses. Suggest discuss further with ISANS contact.
7. More consideration needs to be made on how to prevent registered participants from dropping out last minute. Twelve individuals originally registered to participate in the workshop, however half of them backed out right before it began. This makes it difficult for planning the teams and number of coaches required. Consideration on how to prevent participants from leaving their team after the workshop also needs to be given.

Educational Considerations:

1. Compacting the first week to four days is harder than compressing week two. There are lectures team need before the weekend. Hence if there is a holiday, ensure it lands on week two if possible.

2. There is even more need for a MR-NS Forum as this team's topic has potential connections to other projects. This will require specific funding and planning.
3. Review the post-workshop evaluation form to ensure includes all needed components for accreditation.

Acknowledgements:

The MicroResearch NS team would like to express our gratitude:

To the six participants for their time, great energy and the passion they put into the development of their proposal overview. And for doing this using a virtual format

To Jillian Filliter for her enthusiastic coaching and for filling in as the team's coach at the last minute.

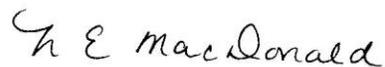
To Research Services at IWK and NSH, Dalhousie University Faculty of Medicine, Dalhousie Medical Research Foundation, and Dalhousie University for supporting MicroResearch.

To the QEII Health Centre Foundation for the promise to provide funding to the team if they are successful with their full MR proposal application.

To Kelly Hunter for her superb support for the infrastructure for this workshop.

To the judges and guest teachers for giving so generously of their time and talents.

Respectfully submitted by



Noni E. MacDonald
MD, MSc, FRCPC, FCAHS