



Report:
MicroResearch Nova Scotia Workshop
Antigonish, Nova Scotia
June 12- June 23, 2017

***Building Local Capacity for Community Focused Research to Improve
Local Health Outcomes***

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 the IWK Health Centre in Halifax, NS. Since 2016 the African MicroResearch program has been used in communities in Nova Scotia. The experience gained from work in other countries is thus being applied in Nova Scotia (MicroResearch-NS). Wherever it is used, the MicroResearch program provides community focused research training, mentorship and small grants for health research projects conceived and done locally.

“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”.

The first MicroResearch-NS Workshop in the Eastern Zone of the Nova Scotia Health Authority was held at St Martha's Regional Hospital, Antigonish, NS from June 12-23, 2017.

The workshop was led by William Webster, Robert Bortolussi and Noni MacDonald in partnership with:

- St Martha's Regional Hospital, Antigonish,
- Library Services of St. Francis Xavier University,
- Dalhousie University Faculties of Medicine and Health Professions,
- IWK Health Centre, Research Services,
- Nova Scotia Health Authority, Research Development Office,

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/ 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 Priorities. While the business plans at NSHA, IWK and 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 aims to develop local community focused research capacity to find solutions to local health problems deemed important by local participants.

MicroResearch-NS Program Model

The fundamentals of the MicroResearch-NS program include:

Workshops:

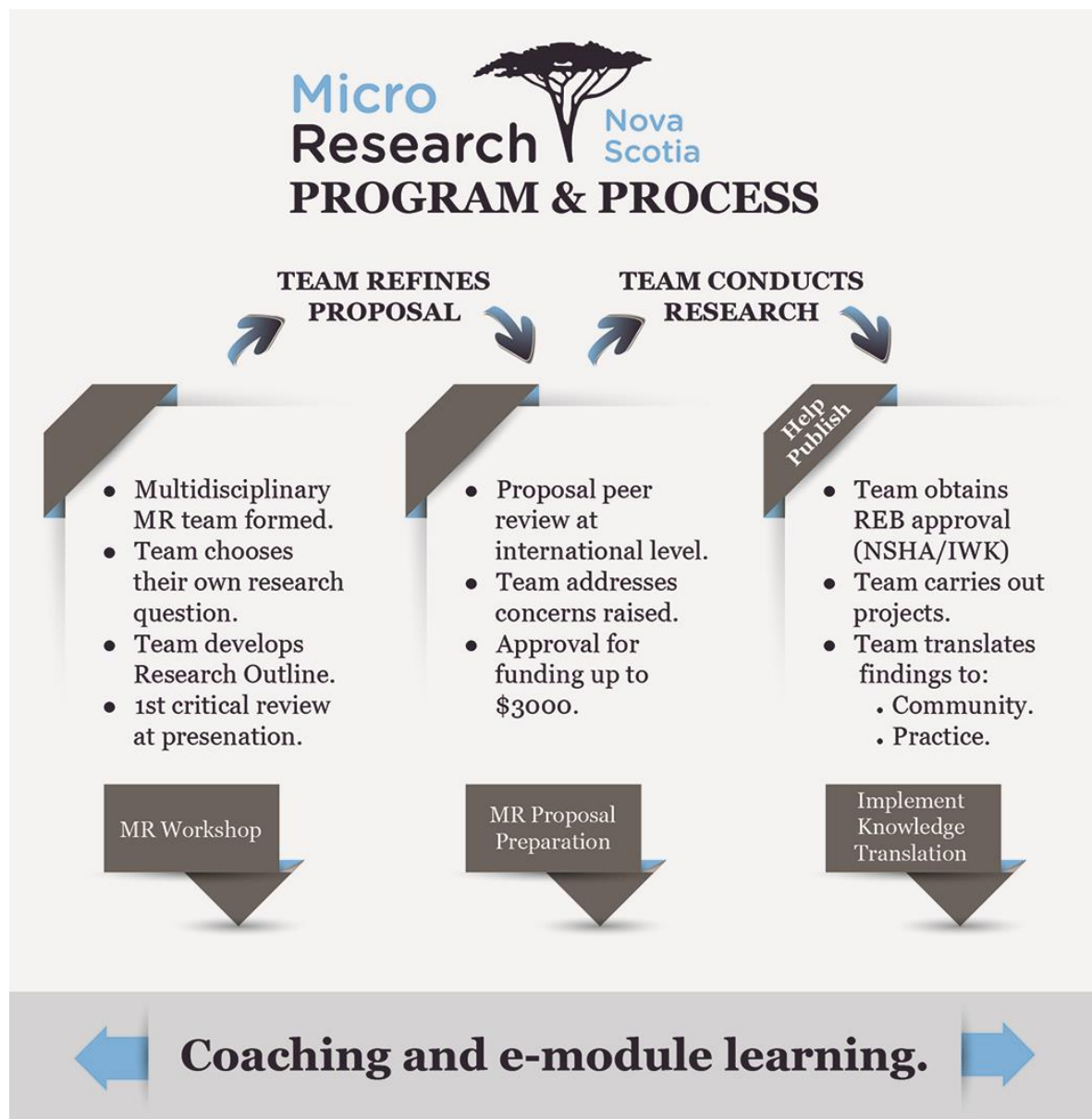
- **Training:** Participants are taught practical and applied community focused research skills

Proposal Preparation:

- **Interdisciplinary collaboration:** teams work together to move a research idea to a fundable proposal
- **Seed funding:** up to \$3000 to support quality projects

Implementation:

- **Project management:** Teams work together to carry out the community project
- **Knowledge sharing:** 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

MicroResearch-NS Program Accreditation

The MicroResearch-NS workshop received accreditation from Dalhousie University Continuing Professional Development, Faculty of Medicine for 40 Category 1 RCPS / CCFM credits. The full program was also reviewed by the Royal College of Physicians and Surgeons of Canada and Category 2 and 3 credits can be garnered for those physicians who complete the entire program. Continuing Professional Development credits can also be garnered by other health professional participants for their continuing education.

MicroResearch-NS Workshop at St. Martha's Regional Hospital

After discussion Antigonish was selected as a site for a MicroResearch-NS Workshop with Drs. Minoli Amit and Olivia Ortiz-Alvarez taking on the role of site co-leaders. They arranged for the program to be held at St Martha's Regional Hospital in a room suitable for the MicroResearch-NS workshop.

Participants: Workshop participants were recruited through personal meetings, referrals and online invitations by the two co-leaders. Initially 13 participants enrolled in the Workshop however 2 needed to withdraw because of pressing clinical needs. Thus the final number of participants was 11. A list of participants is available in **Appendix 1**, with participants teams listed in **Appendix 1A**.

Pre Workshop Assessment

The most common reason participants gave for attending the workshop was a variation on a theme of wanting to learn about MicroResearch or research methods or being able to bring about improvements in care. The community focus was appealing to many participants. Six of the 10 respondents had some experience in research, four as a principal or site investigator. (**Appendix 2**)

Workshop Presenters, Coaches and Guest Lecturers: All faculty who facilitated this workshop had research experience and some also had MicroResearch teaching experience. The list of faculty can be found in **Appendix 3**. Coaches with skills in research design were recruited to support each team with the development of their ideas and proposal. Two coaches are listed in **Appendix 1A**.

Workshop Logistics: All the workshop sessions were held at the St. Martha's Regional Hospital Conference Centre on weekdays from 1-4:30 PM. The workshops began on Monday, June 12th and ended on Friday, June 23th 2017.

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 divided into two "groups" by the MicroResearch-NS faculty on Day 2 of the workshop series such that each group included a variety of professional disciplines, community participants and gender equity across the groups. By Day 5, the two groups had evolved into "Teams" who focused their time, energy and effort on addressing the research question they had agreed to investigate. The daily attendance was excellent – with only a few days when attendance was not 100%.

Workshop Program Overview:

The daily program of lectures, discussions and exercises is summarized in **Appendix 4**. On the first day Bob Bortolussi welcomed participants and coaches who introduced themselves. The breadth of expertise, diversity of background and experiences was immediately evident setting the stage for rich discussion. Bob Bortolussi then lead lecture on good clinical practices. The over view of web and

library resources was co taught with Susanna van den Hoog, the chief librarian at St Francis University. She provided in depth knowledge on the local process for library and search services. A third lecture on how to develop a research question was led by William Webster with each participant being challenged to prepare a research question for discussion on the next, based on their experience and passion (i.e. community based AND community directed).”

On the second and subsequent days one or more presentations were made. Each group then vigorously discussed the merits of each of their individual research questions. One question was then selected as their team workshop project. On the third day of the workshop a spokesperson for each group presented the list of questions to the entire class, noted the one selected by the team and the rationale for its selection. Following their presentation, the two groups worked on their questions to further refine them. The two topics selected by the teams (i.e. unrefined questions) for development into an overview research proposal during the workshop were:

Team 1: Can a public awareness campaign about pop consumption decrease pop consumption in a First Nations community in Nova Scotia

Team 2: What are the perceived barriers to timely access to mental health support in Antigonish?

Iker Gondra and Matthew Murphy joined as coaches for the teams on the third day to guide their activities. Both also were as co-teachers for presentations on statistical methods (IG on Day 3) and research ethics (MM on Day 5).

During the first week presentations were given to help participants understand the ‘tools’ of research; research design, analytic methods, and principles of research ethics. Each presentation led to discussion by participants, faculty and coaches on how to refine the chosen research question developed a proposal, optimize community engagement, and ensure the project would meet ethical requirements.

During the second week, attention shifted to development of communication skills; short presentations on research outcomes, Knowledge Translation (KT), publication, and health policy initiatives. Lectures and coaches helped teams to fine-tune their proposed and presentation of the overview presentation to the judges on the final workshop day. The teams selected their best orator to present on the final day, practiced the presentation as well as developed answers to questions that the judges might pose. Teamwork was emphasized throughout the workshop.

Team Research Proposal Overview Presentations and Judging

The two refined research aims/ questions presented by the teams on Day 10 for adjudication were:

Team 1: *Phase 1: Do Paqtnkek First Nations people drink more pop or energy drinks than the general population?_Phase 2: Why do FN residents of the Paqtnkek community drink pop/energy drinks?*

Team 2: *What are the perceived barriers to timely access to mental health and addiction services for high school youth age 9-12 in Antigonish?*

The highlight on the final day of the workshop was the oral presentations describing how each team would try to answer their research question. Each presentation included a 10-minute overview of the team's research proposal followed by comments and questions from the judges and then constructive suggestions from the other participants on how the proposal might be strengthened (for outline of the day see **Appendix 5**).

Judges:

Four distinguished judges were invited to adjudicate the presentations.

- Gerry Johnston (Dalhousie University)
- Martha Cooper (St. Martha's Hospital)
- June Webber (Director, Coady International Institute at St. Francis Xavier University)
- Bethany MacCormick, Director Quality Services NSHA

The judges listened to the presentations, asked questions and then deliberated on whether each of the projects could go forward to be developed into a full MicroResearch-NS grant proposal. Their Evaluation and scoring system was based on MicroResearch principles (**Appendix 6**).

Best Presentation:

The judges commented on the high caliber of both teams' presentation, the importance of the questions selected for the community and their thoughtful responses to the questions asked following their presentations. The selection of the best presentation was difficult, but they chose Team 1: *Do Paqtnekek First Nations people drink more pop or energy drinks than the general population?*

Judges Overall Comments:

The judges considered both presentations to be feasible and worthy of developing into a full MicroResearch grant on the next application deadline. The presentations were delivered in a clear and compelling manner and showed team members fully engaged in the process. The knowledge translation portions were exceptionally well done; especially relevant since the two projects will investigate complex community issues involving several 'layers' of responsibility. The judges encourage both teams to consult with St Francis Xavier and the Coady Institute faculty to help them achieve their goals on a MicroResearch grant. Additional suggestions for each team were offered to each team. (**Appendix 7**)

Workshop Assessment

An assessment of the workshop by participants was obtained using structured evaluation forms submitted anonymously. All eligible participants completed the final participant evaluation form. The summary of comments is presented in **Appendix 8**. Of note, the majority of the participants rated the workshop highly and would recommend to a colleague.

Final Day Ceremony:

St Marth’s Regional Hospital Foundation: Mr. Joe MacDonald, President of St. Marth’s Foundation attended Day 10 of the workshop to hear the presentations. He was very impressed by the diversity on the teams, the importance of the questions raised for the community and the passion and work the teams had put into their presentations and answers to the judges questions. He noted the commitment of the Foundation to support these two projects, when they have received full scientific merit from MicroResearch NS.



Team Evaluations

From the viewpoint of the coaches and facilitator the teams worked exceptionally well together. They themselves noted the commitment of the team members and valued the diversity.

Comments and Recommendations

Gerry Johnston, when delivering summary comments for the judges, noted that the two MicroResearch-NS questions developed are of great importance at the community level and that none could be answered appropriately using a top-down approach. All of the judges emphasized the diversity of the teams, their links to community and the importance of their voices.

Noni MacDonald thanked Minoli Amit and Oliva Ortiz-Alvaro for the great work in recruiting such a diverse but very community oriented group of participants. She also thanked the judges for taking the time to come to these presentations and the participants for their very hard and enthusiastic work on their questions through out the workshop.

Outcomes and Recommendations from St. Martha’s MicroResearch NS Workshop

Support Considerations:

- Antigonish has great educational resources. June Webber offered support for future workshops like this from St Francis Xavier University and the Coady Institute. Suzanne van den Hoogen had also offered to help through the University's Library resources

Educational Considerations:

- Having topic experts and coaches available locally to participate in the workshop will provide the teams with great insight and help in the future. Engaging such support early on will be important.
- The presentation by Frank Gallant was very well received. He conducted the session on Community Engagement as a small group seminar. This method of presentation created great enthusiasm for the topic and eager participation.

Future Implications:

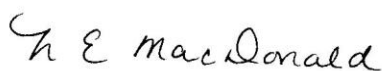
- The success and enthusiasm of this MicroResearch-NS Workshop supports further expansion of the workshop program in the central zone and across Nova Scotia.
- More MicroResearch-NS workshops are being considered: one for Cape Breton in the Eastern Zone, one in North Preston in Central Zone and one for the Annapolis Valley in the Western Zone.

Acknowledgements:

MicroResearch-NS would like to express our gratitude to the following who were instrumental in making this workshop a success:

- Suzanne van den Hoogen: Co presenter on Day 1 "Introduction to the Web"
- Iker Gondra and Matthew Murphy: Co presenters Day 4 "Research Toolkit". Both Iker and Matthew also worked as coaches.
- Frank Gallant: Co presenter on Day 5, "Community Engagement"
- Participants, for their time, energy and passion for their proposed research.
- The judges for giving generously of their time and talents.
- And especially; Minoli Amit and Oliva Ortiz-Alvarez, for their tireless efforts in organizing the workshop over the preceding weeks.

Respectfully submitted by



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Robert Bortolussi
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Will Webster
PhD

Below: MicroResearch Nova Scotia participants, faculty and coaches from Antigonish workshop in June, 2017.

