



OVERVIEW OF WHE RESEARCH PROJECTS/INITIATIVES

Associate Professor, Faculty of Education

1) MEDICAL/NUTRITION/HEALTH

Contacts: Gregor Reid and Shari Hekmat; Charles Majinge (Bugando Medical Centre)

Review of ongoing and upcoming research:

1) Networking opportunities - There are two CIHR grants that Dr. Gregor Reid is a co-P.I. on: the CIHR Catalyst Grant - \$200,000 per year for 5 years for international networking and to bring people together. The team applied and the grant is due in January and WHE is a component. UBC faculty are interested in immunity in children – especially malnourished children and people with HIV. The group will lead the set up of a network of student exchanges and partnerships (not the research itself). They will then be seeking funding to do research into how immunity develops. A second CIHR catalyst application is for networking for fecal transplant studies.

2) MATERNAL HEALTH AND CHILD MALNUTRITION – We are currently waiting on the Bugando Hospital to submit to Tanzanian ethics, a proposal to conduct research on maternal health and child malnutrition. This is a collaborative study with Schulich/Lawson and Bugando Hospital. Meagan Enos, a new UWO master's student is coming in January from UBC to do research related to probiotics and the project. She is interested in how microbiota develop in people who are well-nourished or undernourished, and if Moringa added to Fiti can help. Ruben Hummelen (graduated PhD student) and Joke Dols (Dutch Erasmus student) have helped with earlier research. Two other students from Erasmus went to do research on micronutrients and Moringa and showed it was possible to use it in a new yogurt. Danone has not taken up any work with WHE yet though could bring some competencies. We need to hear from Shari about the experimentation with the powdered form of the GR-1. Have we made any progress towards using the powder directly to make the yoghurt?

3) MATERNAL AND INFANT HEALTH - The Schulich SFD application 2012 -2015 "Engaging Graduate Students in Achieving Healthy Growth" was successful. This project will be led by Dr. Victor Han. The research will address effects of environmental toxins and modified (with probiotics) maternal and infant microbiomes on infant growth and brain/cognitive development. Schulich graduate students will be drawn from Microbiology and Immunology, the Child Health Research Institute, the Brain and Mind Institute, Medical Imaging, Epidemiology and Biostatistics, Health Geography, Nutrition and the new MPH program starting



next year. Schulich's Global Health Program and the Graduate and Postgraduate Studies unit will run the project. The African partners are: APYN/BUCHS in Tanzania; University of Nairobi, Egerton University, Kenya Polytechnic University and the African Institute of Health and Development in Kenya; and the National University of Rwanda in Rwanda. African students will come from Kenya Polytechnic (Lab based) and the National University of Rwanda (Maternal Infant Health).

This project is related to a larger initiative entitled "Altering the Microbiome in Pregnancy and Infancy: New and Innovative Strategy to Achieve Healthy Growth and Development". This initiative will involve measuring the effects of probiotics on women pre-pregnancy, during pregnancy and on their infants up to the age of 2 years. The researchers will also measure the effects of environmental toxins on the same women and infants. All measurements will be on health and brain/cognitive development. Local probiotic strains and portable and affordable brain imaging tools will also be developed.

2) BUSINESS/MICRO-ENTERPRISE

Contacts: Oana Branzei and David Sharp

Ongoing/ upcoming research - Oana Branzei continues to conduct micro-enterprise research in Tanzania, Kenya and Rwanda. She recently had two research assistants in the field.

3) GEOGRAPHY – ENVIRONMENT AND POPULATION HEALTH

Contact: Isaac Luginaah, Dept. of Geography

Ongoing/ upcoming research - Victoria Le, a masters student, is currently in Mwanza doing research into the diffusion of innovation. She is looking into key concepts of diffusion and testing to see if the theory is applicable to the community kitchens and can it be used to predict future diffusion of the probiotics. Research into misperceptions of probiotics is currently being written up by Melissa Whaling who is currently the program leader in Mwanza.

The next area to look at is quantitative research into the impact of geographic information systems to look at access and accessibility systems. Using shape files to analyze key locations that make for success of the programs, this information would be helpful in scaling up operations. Isaac is seeking master's student for that now.



A PhD student student, Ellena Andoniou has not yet published from **World Bank grant** and there is a meeting today to address this.

4) WOMEN'S STUDIES – VIOLENCE AGAINST WOMEN, IMPACT ON WOMEN

Contacts: Katherine McKenna and Tracy Isaacs, Faculty of Women's Studies

Ongoing/ upcoming research - Katherine McKenna and Tracy Isaacs travelled to Tanzania in November, 2011 to explore internship opportunities for students and potential collaborations and partnerships with women's organizations and scholars at the university in Dar es Salaam. Their project is funded by an International Research Grant. They are looking at the economic costs of violence against women and the topic of women's empowerment.

5) EDUCATION – IMPACT OF THE INTERNSHIPS/SERVICE LEARNING; WOMEN'S LEARNING; CROSS-CULTURAL LEARNING

Contact: Marianne Larsen, Faculty of Education

Ongoing/upcoming research - Marianne Larsen at the Faculty of Education received an Academic Development Fund grant to conduct a study on the impact of the student internships on the students themselves and on the local, Tanzanian host communities. This research will be carried out between May 2012-January 2013. She will be assisted by Bob Gough, co-investigator, and Allyson Larkin, a doctoral student at the Faculty of Education, who will be the research assistant. Allyson is also starting her research on the impact service learning on WHE interns.

Another possible area of educational research involves research into how women teach other women to make the probiotic yoghurt – pedagogical analysis – to make scaling up easier.

We have possible partners to work with at the Faculty of Education, University of Dar es Salaam and the Kigali institute of Education. Marianne is to investigate these possible partnerships for research.

Service Learning: Nursing



Yolanda envisions a possible upcoming study that involves nursing students and nurse educators being engaged in a service learning opportunity with the women and children in Tanzania, Kenya, and Rwanda. A qualitative study could be conducted to gain insights into students' and educators' perceptions of what they learned from working with women and families who are living with HIV/AIDS, who are experiencing issues of poverty, and who are also very resilient and courageous.

6) INFORMATION AND MEDIA SERVICES– INFORMATION NETWORKS OF WOMEN ENTREPRENEURS

Contact: Daniel Mumba, PhD Student; Thomas Carmichael, FIMS Dean

Ongoing/upcoming research - A PhD student will be conducting research beginning this summer on information-seeking patterns of women's microenterprise focusing on the yoghurt kitchens. Daniel Mumba will be an SFD student.