



McGill Institute for
Global Food Security
Institut pour la sécurité
alimentaire mondiale
de McGill

SPUDS & SPROUTS



#1

January - April 2016

NEWS FROM THE MCGILL INSTITUTE FOR GLOBAL FOOD SECURITY

Dear Colleagues and Friends of the McGill Institute for Global Food Security,

Message From



The Director
**Hugo
Melgar-Quiñonez**

It is with enormous pleasure that I welcome you all to this first issue of our Institute's newsletter. As with everything we do at the McGill Institute for Global Food Security (GFS), this newsletter is the result of the collective work of students, postdoctoral fellows, researchers, and professors devoted to the cause of global food security. Through this newsletter, the Institute aims to contribute to the analysis of the most current challenges affecting food security worldwide. A few of the most urgent questions refer to topics such as: sustainable food production, climate change, food wastage, changing dietary habits, persisting under-nutrition along with increasing obesity, scaling-up research innovations, development of multi-sectoral partnerships, and effective community involvement in all phases of the food security agenda. The progress achieved after the World Food Summit of 1996 and the Millennium Conference, along with advances in knowledge and technology, sets the platform for humanity to liberate itself from the burden of hunger and its consequences. Because of its complex nature, a multidisciplinary approach to food security is needed in its assessment, and in the development and implementation of contextually adequate and sustainable policies, programs and interventions. With optimism, I hope that this newsletter will contribute to the exchange of ideas with the end goal of strengthening our continuous search for a world free of hunger.

Headlines

New Funds

The Canadian International Food Security Research Fund (CIFSRF) program of Canada's International Development Research (IDRC) and supported by Global Affairs Canada (GAC), has funded two CAD \$1.5M McGill University projects in food security:

Expanding adoption of nutritious, disease-resistant potatoes in Colombia (PI: Prof. Melgar-Quiñonez) and Reducing barriers to millet production and consumption in India (PI: Prof. Vijaya Raghavan, Bioresource Engineering Department).

Advisory Board

The GFS Institute has an advisory board of 11 members. The Board's primary mandate is to promote and to support the Institute worldwide.

New Partnerships

A new Inter-Sectoral Partnership was established last October between McGill University and CARE Canada to conduct applied research in four African countries - Ethiopia, Malawi, Mozambique and Zambia. Several McGill faculty members participated in the launch of the partnership along with officers from various development agencies and researchers from Cornell University.

Recent & Upcoming Events

May

24

Advisory Board Meeting

A meeting of the Advisory Board took place on May 24, 2016 to discuss and strengthen the role of the Institute facing global food security

July

24-26

CSA-CHS Joint Conference

The Canadian Society of Agronomy (CSA) and the Canadian Society of Horticultural Science (CSHS) will hold a joint meeting in Montreal from July 24-26, 2016

[Click here for more information!](#)

Where to Find Us

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www.facebook.com/McGillGFS

info.gfs@mcgill.ca

+1 (514) 398 7705

<http://in.linkedin.com/McGillGFS>

Work by the Institute

2015

Jan
3

World Affairs Conference. Current Challenges in Global Food Security. Upper Canada College, Toronto, Ontario.

Mar
12

Lecture at the M.Sc. Program. Food Security and Nutrition. National University of Colombia. Bogota, Colombia.

May
27-29

Lecture at National Workshop. Food Security Assessment. National Food Security Council, Secretariat of the Presidency, United Nations. San Salvador, El Salvador.

Nov
3

1st International Forum. Food Security and Nutrition Public Policies. School of Nutrition and Dietetics, University of Antioquia. Medellin Colombia.

Nov
13

Lecture. The Latin American and Caribbean Food Security Scale. Central Bank of Nicaragua, National Institute of Statistics, and United Nations. Managua, Nicaragua.

Nov
26

International Seminar. Undernutrition Reduction in Bolivia. Ministry of Health and Belgian Cooperation Agency. La Paz, Bolivia.

Dec
5

Lecture. 10th Anniversary of the Observatory of Food Security and Nutrition. National University of Colombia. Bogota, Colombia.

Dec
10

Presentation. Food Insecurity and Under-Nutrition in Guatemala. University Rafael Landivar. Guatemala, Guatemala.

2016

Jan
20

Inception Workshop for the IDRC funded project. Expanding adoption of nutritious, disease-resistant potatoes in Colombia. Bogotá, Colombia.

Mar
9

The Walrus Talk. Funded by the MasterCard Foundation. McGill University. Montreal, Canada.

April
1-15

Educational Workshop. Food Loss and Food Waste: Connecting the Dots toward Food Security. Holy Spirit University of Kaslik. Kaslik, Lebanon.

Educational Workshop on Food Waste and Food Security



Food wastage refers to food loss and food waste. An estimated 1.3 billion tons of food is lost or wasted every year around the globe.

In developing countries most of the food wastage occurs during the harvest, post-harvest and processing phase. In developed countries, the majority of the loss/waste occurs at the consumer level.

As the world searches for strategies to feed the projected 9 billion people in 2050, improved food management practices are required to reduce losses and waste and increase the world food supplies in a sustainable manner.

USEK (Holy Spirit University of Kaslik, Lebanon), in collaboration with Dr. Patrick Cortbaoui, Academic Associate & Project Manager from the McGill Institute for Global Food Security, organized an educational workshop on this matter from April 1 to 15, 2016.

The following topics were discussed over the course of the workshop:

- 1) Food Quality Management
- 2) Resource-use efficiency of food production
- 3) Measurement and prevention of food wastage
- 4) Technology innovations to address food wastage

To interested parties, please contact Dr. Cortbaoui: patrick.cortbaoui@mcgill.ca

Food Security in the World



United Nations

On September 25th 2015, countries adopted a set of goals to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to be achieved over the next 15 years. For the goals to be reached, everyone needs to do their part: governments, the private sector, civil society and people like you.

[Read More](#)



Handbook for Monitoring and Evaluation of Child Labour in Agriculture

Food and Agriculture Organization of the United Nations

Many children around the world work on the farm; for poor families such activities by children are integral to their livelihoods. For the children employed, agriculture is not nearly as beneficial. These children are often times exposed to hazardous conditions which may affect their health and the significant time commitment goes at the cost of their education, thereby jeopardizing their future.

Improving the situation of children in rural areas and preventing child labour, is a moral duty that drives the continued efforts by FAO around the world to reduce child labour in the agricultural sector.

The Handbook provides guidelines and practices for integrating child labour monitoring schemes into evaluation frameworks for broader food security and agricultural and rural development.

[Read More](#)



Food and Agriculture Organization of the United Nations

FAO launched the Voices of the Hungry project in 2013 to provide up-to-date information about food insecurity that is policy-relevant and contributes to strengthening political will - information that speaks to people and leads to change.

The Technical Report on the FIES "Methods for Estimating Comparable Prevalence Rates of Food Insecurity Experienced by Adults Throughout the World" is now public.

In 2014, the GFS Institute, in collaboration with the Food and Agriculture Organization (FAO), and the "Voices of the Hungry" project, developed the McGill Global Food Security Data Lab. Through this joint initiative, we will continue to support several projects examining food insecurity at the global level.

[Read More](#)

Research & Publications

Oral and Poster Presentations

Food Insecure Women with Lower Education Report More Health Problems in a Global Sample of Individuals

Diana Dallmann, Meghan Miller,
and H Melgar-Quinonez

FASEB J April 2016

Women's Empowerment and Food Security Status: A Global Comparative Study of Women Living in Rural and Urban Areas

Kate Sinclair, Davod Ahmadigheidari, Diana Dallmann,
and H Melgar-Quinonez

FASEB J April 2016

Food Insecurity Leads to Lower Dietary Diversity Among Smallholder Farmers in Haiti

Jasmine Parent, Diana Dallmann, Kate Sinclair, Miguel Garcia,
and H Melgar-Quinonez

FASEB J April 2015 29:585.19

Participatory agroecological network modeling I: Qualitatively combining community and research knowledge

JJ Malard, Díaz M Rojas, JF Adamowski, J Gálvez,
and H Melgar-Quinonez.

American Society of Agricultural and Biological Engineers (ASABE) July 2015

Impacto de las Redes Ecológicas en la Producción Agrícola para la Seguridad Alimentaria

Marcela Rojas Díaz, Julien Malard, Jan Adamowski, Juventino Gálvez, Luis Andrés
Arévalo-Rodríguez, and H Melgar-Quinonez

Latin American Nutrition Conference. Dominican Republic, Nov 2015

Exploring the Relationship between Corruption and Food Security Status on a Global Scale

Gabrielle Helal, Davod Ahmadigheidari, Nicolas Kosoy,
and H Melgar-Quinonez

FASEB J April 2016

Socioeconomic Characteristics of Food Insecure Households in San Pedro, Paraguay

Diana Dallmann, Ross Mabel Lopez, Juan Carlos Orue,
and H Melgar Quinonez

FASEB J April 2015 29:585.24

Use of participatory system dynamics modelling to assess the sustainability of smallholder agriculture

Malard JJ, Adamowski JF, Rojas Díaz M, Carrera J, Gálvez J, Monardes H
and H Melgar-Quinonez

American Society of Agricultural and Biological Engineers (ASABE) July 2015

Diversidad Animal y Seguridad Alimentaria en Pequeños Productores de Guatemala y Haití

Anh Bui, Lillian Yin, Julien Malard, Diana Dallmann, Humberto Monardes, Miguel
García, and H Melgar-Quinonez

Latin American Nutrition Conference. Dominican Republic, Nov 2015

La Inseguridad Alimentaria de Mujeres en el Pasado se Asocia con Obesidad en el Presente

Olga Patricia García Obregón, Laura Andrea Hernández, Dolores Ronquillo, María del Carmen
Caamaño, Jorge L Rosado, and H Melgar-Quinonez

Latin American Nutrition Conference. Dominican Republic, Nov 2015

Published Papers

Characterization of postharvest practices and losses of fresh produce along the Caribbean supply chain: Guyana and St. Kitts-Nevis

Cortbaoui, P. E. and M. Ngadi. 2016

Journal of Postharvest Technology, 04 (01): 016-025.

A new method to quantify postharvest quality loss of cucumber using the Taguchi approach

Cortbaoui, P. E. and M. Ngadi. 2015

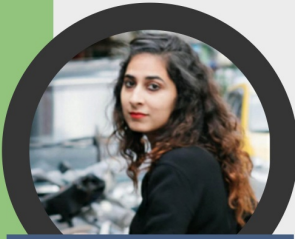
Food Science and Quality Management, IISTE, Vol. 44

Technical Reports

Vulnerability Assessment Province of South Kivu Democratic Republic of Congo

Ortega, J., Melgar-Quinonez, H., Cortbaoui, P. E. and Dallmann D.
Report for Adventist Development and Relief Agency (ADRA)
Washington, D.C.

Our Students



Ekta Dilip Armanani

Ekta is currently a Masters Candidate at McGill University. Her research draws comparisons between the food security statuses of the global rural youth and other demographic groups. In doing so, Ekta hopes to quantify the negative influence of the steadily increasing unemployment on young rural communities around the world.



Anh Ngoc Bui

Anh completed her undergraduate degree in nutrition and is now a Masters Candidate at McGill University. Using data from the Gallup World Poll, her research aims to bring the overlooked issue of food insecurity in the middle income class into light.



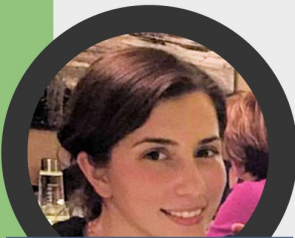
Yvonne Frangi

Yvonne is completing a research internship at McGill University under the supervision of Prof. Hugo Melgar-Quiñonez. Her research focuses on the determinants of food security in the Middle East region.



Beatriz Elena Gil Gil

Beatriz is completing an internship at the Institute for Global Food Security, McGill University. Her research concerns the determinants of food expenditure of households in Medellín and their influence on the classification of food security.



Gabrielle Helal

Gabrielle Helal is a registered dietitian and completed her undergraduate studies, in dietetics, at the University of Ottawa. She is currently specializing in food security through her research on food security and corruption, under the supervision of Prof. Melgar-Quiñonez.



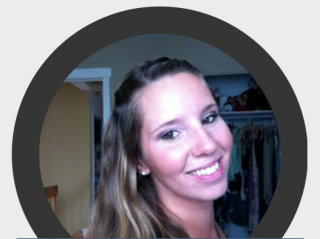
Julien Malard

Julien Jean Malard is a PhD candidate at McGill University. His research centres on the use of participatory modelling to assess agricultural development sustainability, on the development of agroecological simulation models for integrated pest management design, and on analyzing the interactions between these two spheres. Scholarships: IDRC Doctoral Award, FRQNT Bourse de doctorat en recherche, Vanier Scholarship.



Kate Sinclair

Kate Sinclair is a PhD Candidate at McGill University in the School of Dietetics and Human Nutrition. Her current research involves conducting a process evaluation of a scaling-up nutrition intervention. The project's main objective is to scale up the adoption of improved potato varieties with high nutritional qualities for Colombian consumers and potato producers in an operational strategy that links agriculture to nutrition.



Stephanie Trempe

Stephanie is a Masters Candidate at McGill University. Her current research draws largely on the sheep feed substitution projects that were performed in 2013 and 2014 in Barbados. Awards & Bursaries: McGill Graduate Excellence Fellowship (\$5000); IICA Research and Internship Assistance Program (\$5000); Royal Canadian Naval Benevolent Fund (\$3500)

Involvement Opportunities

Projects with the GFS Institute



Livestock Diversity and Food Security

We are looking for students interested in doing a special topics course/honour's thesis project on the impact of livestock diversity on household food security. We have interesting results from 2011 Guatemala survey data and would like to repeat the study with more countries and years. The project has a high chance of leading to peer-reviewed publications.

Weather Forecasting in Guatemala

After having faced a series of droughts, Guatemalan researchers are interested in developing an early warning system for climate and crop production. The project includes model building and data analysis with very high prospects for application in the field.



Integrated Pest Management

Wondering why biological pest control sometimes works (or doesn't)? We are too! Join our agroecosystems network modelling team to find out how biological control can be scaled up.

Food Security Modelling

Interesting in learning how to predict food security in the long term? Join our research group on participatory food security modelling!



Contact us for more information!
info.gfs@mcgill.ca

Femmedere

Volunteering opportunity at Student's Society at McGill University (SSMU) Femmedere!

Join the club and help run cooking and nutrition workshops at the Native Women Shelter Montreal.
Anyone can join!

SSMU Femmedere's mission:
To empower members of underserved populations in the local community with the opportunities to achieve a healthier lifestyle.

If interested, please contact:
femmedere.mcgill@gmail.com

GFS Club

Macdonald Campus Global Food Security club is looking for volunteers to join next Fall!

Help organize and participate in their various events!

The GFS club's mission:
To raise awareness on food security issues at the local and global level. It supports, shares information, and collaborates with other student organizations to develop a network between Mac and downtown McGill, other universities, local NGOs, international NGOs, and the general public.

If interested, please contact:
mcgillgfs@gmail.com



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