

Summary Report 2015 Food for Health Workshop

Knowledge Translation in Public-Private Partnerships

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Co-sponsored by



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Summary Report

2015 Food for Health Workshop

Knowledge Translation in Public-Private Partnerships

PURPOSE

This report provides a summary of the workshop presentations and discussion on translation of knowledge stemming from food-health public-private partnership research. It also incorporates key findings from a survey of Canadian Nutrition Society (CNS) members that was conducted in advance of the workshop.

BACKGROUND

In his welcoming remarks, Dr. Rob Bertolo highlighted the role of CNS, stemming from a merger between the Canadian Society for Nutritional Sciences and the Canadian Society of Clinical Nutrition, as a forum to bring together experts from academia, government, industry, hospitals and clinics, and other organizations on the topic of nutrition. The goal of the Food for Health initiative is to improve the health of the population through food. Dr. Leah Gramlich further explained the role of the CNS, and specifically the Food for Health initiative, as advocates for the importance of food and nutrition to improve the health of Canadians.

The Food for Health workshops began in 2011 out of concern for the lack of meaningful progress in advancing health using food-based strategies. The Food for Health workshops use a solutions oriented approach and aim to:

- Advocate for the importance of food and nutrition for health, and raise awareness with key decision makers
- Be a catalyst for change
- Facilitate connectivity and partnerships

The 2015 workshop builds on the foundation set forth in previous programs.

- 2011 - Food for Health Connections: Building a Deeper Collaboration
- 2012 – Moving the Food for Health Agenda Forward: Tackling the Barriers of Regulation and Conflict of Interest
- 2013 – Communication and Food Messaging: The Consumer Disconnect
- 2014 – Principles and Philosophies for Development of Ongoing Partnerships to Support Food-Health Research

Key learnings from previous workshops include:

- There is a Knowledge Translation (KT) and Transfer Gap hindering progress on Food for Health strategies.
- A piecemeal approach to food-health initiatives is one of the major reasons for the KT gap, as well as slow progress on consumer acceptance.
- There is a leadership gap in food for health which is impeding progress on the health agenda.
- There are multiple stakeholders with differing priorities. This poses challenges to partnership and collaborations.

- Research and evidence supporting the role of food in disease modification or amelioration needs to be scientifically valid and credible.
- The healthcare community at large is currently not engaged and empowered to use food-health strategies to reduce the burden of chronic disease through modifiable risk factors.
- There is a need to focus on practical solutions that connect better with consumers if gains are to be made in maintaining and improving the health status of Canadians.

Looking ahead, there is realization that basic, applied and community research has evolved towards increased industry and academic collaborations which are increasingly being promoted by governments. This shift makes competing interests unavoidable. If forward progress is to be made, there must be a move to a reasonable weighing of both benefits **and** risks, along with a focus on scientific integrity. Conflict of interest must be managed in an open approach.

Workshop Sponsors

The Canadian Nutrition Society (CNS), a not for profit organization, and International Life Sciences Institute (ILSI) North America, a public non-profit foundation, were the co-sponsors of the 2015 workshop.

2015 Workshop Objective

The 2015 workshop explored the theme of **translation of knowledge stemming from public-private partnerships centered on food and health**. The workshop also provided a forum for attendees to exchange ideas on how multi-stakeholder collaborations based on food and nutrition can benefit the health of Canadians.

Speakers were asked to review and discuss their organizations approach to translation of knowledge, particularly knowledge generated from collaborations and public-private partnerships.

The audience was asked to share and exchange knowledge, think about what success might look like after this meetings, contribute to the breakout sessions, and think both practically and “outside the box”.

RESULTS OF THE PRE-WORKSHOP SURVEY

A pre-workshop survey was sent to CNS members and previous workshop attendees to understand the level of awareness of topics to be discussed as part of the 2015 workshop program. Dr. David Ma presented the highlights from the survey responses and they are summarized below. There were a total of 75 respondents. Of the respondents, 86% were CNS members.

Survey Respondents (respondents could identify more than one sector)

- 44% Academia
- 30% Industry
- 10% Non-governmental Organizations (NGO)
- 22% Medical/Health Community

Based on your experience, can you please describe your understanding of Public-Private Partnerships (PPP)?

Most common responses include:

- No idea
- Shared funding to achieve common goal
- Partnerships of mutual benefit
- Neither side feel that they get their fair share and there is a lot of distrust

What are priority areas or emerging issues in food-health that could contribute to improving the health of consumers/the public?

Most common responses include:

- Education – Nutrition education, literacy, nutrition knowledge, accessibility of credible knowledge, educating media around fad diets
- Labelling- Sodium, menu labelling, prevention, nutrition labelling, serving size
- Food vs Nutrient – Focus on whole foods and eating patterns vs nutrients
- Requirements/Regulations – DRIs, protein requirements, health claims, food fortification, GMO's, organic, evidence based guidelines
- Disease- Obesity

Would these areas/issues benefit from multi-stakeholder collaboration (eg. Industry, academia, and government)?

- 92% responded YES

In your opinion, please list up to three barriers that may exist that could impede industry, academia and government from working together.

Most common responses include:

- Sharing intellectual property
- Mismatched timelines
- Knowing how to connect; inadequate funding
- Lack of knowledge translation experience by academics
- Perceived conflict of interest with any industry involvement/Lack of trust
- Lack of prioritization between knowledge generation vs knowledge generation
- Reluctance of some scientists to work with industry
- Internet bloggers and gurus with a strong voice
- Insufficient funding

In your opinion, please list up to three opportunities that may exist that you think could help industry, academia and government in collaborating to communicate and move knowledge into action (i.e. product, brochure, advertising campaign)? Top Responses:

- Support by local, educate children where food comes from
- Investment in online resources that allow for real public engagement
- Enhance agility among funding agencies
- Nutrient database for all foods
- Avoid COI through unrestricted funding opportunities

Do you have prior experience with PPP?

- 64% responses YES

Are you currently engaged in a food-health knowledge translation partnership/collaboration program offered by:

- CIHR: 3 responded YES
- AAFC: 1 Responded YES
- Other: 2 Responded YES

Have you previously attempted to engage in PPP knowledge translation activities but the project could not be carried out?

- 26 Responses.
 - 7 Responded YES (26.9%),
 - 19 Responded NO (73.1%).
- Of those Responding YES,, the following barriers were identified:
 - Finding relevant/interested partners,
 - Timelines between announcement of programs
 - Developing partners/securing matched funding
 - Lack of government involvement

In past workshops, the question of who should communicate/transmit knowledge outcomes has been discussed. Who is best equipped to perform this function? Rank the following from 1=least equipped to 5=most equipped.

Variable	Knowledge Creators (researchers)	Dedicated Professionals (marketers/advertisers)	NGOs	Government	Other
1 - least equipped	13.0%	4.3%	8.7%	8.7%	65.2%
2	50.0%	13.6%	22.7%	13.6%	0%
3	17.4%	26.1%	39.1%	13.0%	4.3%
4	14.4%	13.0%	17.4%	39.1%	13.0%
5- most equipped	4.5%	45.5%	13.6%	27.3%	9.1%

Overall, *Marketers/Advertisers* and *Government* were considered most equipped to communicating knowledge. Comments highlighted:

- There is a desire for the researchers (knowledge creators) to be the spokesperson instead of someone else interpreting,
- Neutral third parties (NGO) are trusted to deliver a balanced unbiased message.

Please explain the role of each of these sectors in sharing the knowledge outcomes.

Most common responses include:

Knowledge Creators (Researchers):

- Main authority in communicating the information
- Should communicate knowledge to health professionals, academic and government, and sometimes media
- Science experts, but often do not have communication tools or expertise. Need to work with communication experts
- Provide a transparent, ethical, accurate message
- Being the front person and vetting information

Dedicated Professionals (Marketers/advertisers):

- Have necessary resources to communicate messages widely, clearly and creatively
- Consumer understanding and experience in delivering messages
- Industry should not be presenting messages
- Should help craft messages, but should not be in charge of messaging (this should be left to science experts and individuals who understand the science)
- Should focus on education, not marketing
- Ensure messaging is consistent

NGOs:

- Neutral third-party partners that have best interest of public in mind
- Provide support for science and consumer understanding
- Provides credibility and trust to PPPs
- Need to ensure they don't have their own agendas/lobbying
- Coordinate with government to communicate to public
- Expertise in mass communication strategies

Government:

- Government has the resources to invest in broadcasting, narrowcasting and public engagement
- Responsible for creating policy based on evidence and communication of research and policy to public
- Should have their topic experts (PhD) sharing knowledge
- Play the most important role in selecting what messages get conveyed to public
- Typically a trusted source of information
- Need to consult, listen and follow up with regulations, and be transparent in this process
- Need to be unbiased and the most objective
- Need to help define the paradigm of food and health
- Identify opportunities for changes to policy

Other:

- Health professionals (those that are effective communicators) should deliver messages to public
- All groups need to work together in order to effectively communicate messages

Please rank the following critical criteria when evaluating sources of information? Rank the following from 1=least important to 4=most important

Variable	Credibility	Expertise	Brand Recognition	Other
1- Least important	4.8%	9.5%	28.6%	57.1%
2	0.0%	52.4%	38.1%	9.5%
3	26.3%	26.3%	42.1%	5.3%
4- Most important	73.9%	17.4%	0.0%	8.7%

How important are these sources of information to you on a scale of 1-10 (1=least important, 10=most important).

- Webinars: 5.8
- Conferences: 7.7
- Short Courses/Workshops: 6.72
- Websites: 7.5

On a scale of 1-10 (1=least important, 10=most important), how effective are the following sources of information/knowledge in helping you to inform your audience?

- Webinars: 5.9
- Conferences: 6.7
- Short Courses/Workshops: 6.6
- Websites: 7.4
- Advertising: 5.2
- Social Media: 6.2

Other. Please specify and explain:

- Need face to face communication prior to web based sources (websites, web meetings) to be effective
- Social media has potential to be effective but currently not trusted
- Variety of sources is necessary
- Websites effective if all the necessary information can be found on one trusted site
- Sources differ with age and audience
- Reputable publications are great source of information

Please provide any additional comments you feel are potentially useful strategies to enable the success of PPP.

Most common responses include:

- Choosing the correct partners
- More opportunities for these groups to interact and connect, and more meetings throughout PPP to discuss problems and progress
- Longer time for matched grant turnaround time and applications (more advanced notice of competitions)
- May not need to pursuit PPP, may need to shift focus away from these

On a scale of 1-10, rate each of the following groups in terms of their importance for targeting food-health knowledge and practices to enhance the health of Canadians (1= least important; 10 = most important).

- Direct to Consumers: 7.5
- Government Policy Makers: 7.8
- Medical Professionals: 7.9
- Academic Professionals: 6.7
- Retailers: 6.4
- Manufacturers: 6.7
- Processors: 5.8
- Producers: 6.0

Communication, marketing, knowledge translation and social media are tools used to transmit information. Uptake of such information is critical to the adoption of food-health practises and behaviours leading to meaningful changes. Based on your experiences, what are effective approaches leading to the uptake/adoption of healthful practises? In other words, how do we make knowledge (products/tools) relevant for uptake?

Most common responses include:

- Discuss messaging with stakeholders (ensure consistency throughout stakeholders)
- Make messaging easy to understand, concise, clear, consistent, interesting and important to consumers. Messaging should also be developed considering the end user.
- Messaging needs to come from trusted sources
- The messaging needs to be in real time (social media is fast paced)
- Need to show resources and ensure accurate information is being communicated
- Consult with consumer marketing professionals
- The public listens and responds to celebrities – need to get correct messages to these influential people

In your opinion how important are new and emerging social media tools for the communication of knowledge, uptake of knowledge and enacting change?

Variable	Very Important	Somewhat Important	Not Important	Don't Know
Facebook	52.2%	43.5%	0%	4.3%
LinkedIn	4.3%	34.8%	56.5%	4.3%
Twitter	34.8%	52.2%	4.3%	8.7%

Most common comments include:

- There are 30 million other ‘nutrition experts’ in Canada that will argue with the actual experts, not sure where to go with social media
- Not sure these initiative will be successful
- YouTube, blogs, radio and news media are other tools to communicate information
- Community groups, science fairs and exhibits

In your experience, do you feel that support is available at the provincial/federal level for PPP in food-health knowledge translation?

- 61.9% responses NO

Most common comments include:

- The process is too slow and opportunities are not well advertised
- Not many focus on the KT portion of PPP (mostly knowledge generation/creation)
- Not sure

Please rate your knowledge of food-health knowledge translation collaborations between industry and academia offered by the following agencies and organizations:

Variable	Little knowledge	Reasonable knowledge	Fully knowledgeable
CIHR	39.1%	47.8%	13.0%
NSERC	47.8%	39.1%	13.0%
AAFC	47.8%	47.8%	4.3%

Those who indicated poor knowledge to any of the responses above, suggested the following to raise awareness about the programs:

- Circulate information and ask to read and review
- More information on how the funding opportunity works and how to apply
- Media coverage
- Presentation of opportunities through key membership groups

Are these funding programs of interest to your industry or organization?

- 85% responded YES

What steps could be undertaken to foster greater collaboration and interaction in support of PPP for knowledge translation in Canada?

Most common responses include:

- More government funding
- Better tools to facilitate collaborations/more forums to discuss
- Better defined outcomes from PPPs
- Academics and industry need to better understand each other
- Increased public awareness of PPPs
- Align Canadian and American funding programs (international collaboration)
- Transparency

In your opinion, what are some potential post-workshop outcomes that will help broker future collaborations in PPP for knowledge translation?

Most common responses include:

- Share the minutes/report
- Data/report showing outcomes and impact of PPPs

- Continue with these meetings, maybe more frequently than annually in order to move agenda forward
- Have one place to access all information. Include tips on how to approach potential partners, funding opportunities, keys for success, barriers and how to overcome, examples of previous success stories
- A draft action plan
- Forum to discuss potential bias of collaborations
- Discuss new funding opportunities and research needed to drive regulatory decisions

How do you see various stakeholders (CNS-SCN, ILSI North America, Health Canada, AAFC, CIHR, NSERC, Industry...) playing a role in the PPP you described above?

Most common responses include:

- Provide resources to ensure successful completion of projects
- Industry stakeholders need to be protected, as they are often viewed as self-serving and biased by the public
- More awareness of programs and convince marketing departments of opportunities
- Government funding agencies need to have PPPs as priority
- Need to have 3rd parties to 'broker' the PPPs and ensure keep on track. They can also help communicate unbiased messages out of the knowledge creation.

Executive Summary of Survey Results:

Four key themes emerged:

1. **PPP's are of value and can help drive uptake of the food for health agenda.** However, barriers remain including mistrust, lack of knowledge and understanding of programs, and how to make connections.
2. **Education belongs to all and represents a potential area of focus.** While education around food labelling and requirements were identified, broader (credible) nutrition education was also identified as an important need. Education represents a potential area for working together in novel ways; focus on prevention and chronic disease management including obesity.
3. **Who does the educating and for whom was identified as an important consideration.** Also, identifying what are the best communication vehicles. This was largely a concern expressed by academics who are the knowledge generators but not necessarily the best communicators.
4. **Conflict of interest continues to be a concern,** including transparency and strategies to manage conflict.

What might success look like stemming from the Food for Health Workshops? Continue working amongst key stakeholders (from academics and knowledge generators to marketers) to identify an area of importance and develop a go forward strategy. Connectivity remains an important step in the process of connecting partners.

WORKSHOP PROGRAM

Thursday, May 28, 2015

9:00 AM – 4:30 PM, Winnipeg Convention Centre, Winnipeg MB

- 9:00 AM Welcome
Robert Bertolo, PhD, *CNS-SCN President and Assoc. Professor, Memorial University of Newfoundland*
- 9:10 AM Introduction & Background
David Ma, PhD, *CNS-SCN Advocacy Committee Executive and Assoc. Professor, University of Guelph*

Leah Gramlich, MD, FRCPC, *CNS-SCN Advocacy Committee Chair and Professor of Medicine, Adjunct Prof in Agriculture Life and Environmental Sciences, University of Alberta*
- 9:30 AM Keynote Presentation: Why Food Now: The Challenge of Feeding Nine Billion
Dennis Dimick, BS, MS, *Executive Editor, Environment, National Geographic Magazine*
- 10:15 AM Coffee Break
- 10:30 AM Why “Just the Facts” Misses the Mark: Trust Building through the Art of Values-Based Science Communication
Roxi Beck, BA, *Director, Center for Food Integrity*
- 11:00 AM Health Check: Lessons Learned from a Pioneering Front-of-Pack Nutrition Label Program
Jeff Sommers, PhD, *Manager of Research and Health Initiatives (BC & Yukon) and Director of Knowledge Exchange, Heart & Stroke Foundation Canada*
- 11:30 AM Nutrition Communication in Retail: Loblaw’s Role in Promoting Healthier Food Choices for Canadians
Samara Foisy, RD, MHSc, *Senior Manager Dietitian-Product Development, Loblaw Brands Limited*
- 12:00 PM Lunch and Networking Session
- 1:00 PM Knowledge Translation for Researchers and Clinicians: The Experience of the Canadian Malnutrition Task Force
Heather Keller, PhD, RD, FDC, *Professor, Research Chair and Chair, University of Waterloo, Canadian Malnutrition Task Force*
- 1:30 PM Knowledge Translation to Producers
Peter Jones, PhD, *Director and Professor, Richardson Centre for Functional Foods and Nutraceuticals, Manitoba Agri-Health Research Network, University of Manitoba*

- 2:00 PM Finding the Right Fit: Opportunities and Requirements of the Networks of Centres of Excellence Programming
Fouad Elgindy, BSc, *Senior Program Manager, Networks of Centres of Excellence*
- 2:30 PM Building a Platform for Public Private Partnerships: Update from 2014 Food for Health Initiative
Eric Hentges, PhD, *Executive Director, ILSI North America*
- 2:40 PM The Food Map: Repurposing Research Information and Research Data for Maximum Benefit
Wayne Johnston, MLIS, *Head of Research Enterprise and Scholarly Communications, University of Guelph Library*
- 3:00 PM Breakout Session: Opportunities, Barriers, Tools and CNS involvement in Public-Private Partnership Knowledge Translation
- 3:45 PM Report Back
- 4:25 PM Concluding Remarks
Leah Gramlich, MD, FRCPC, *CNS-SCN Advocacy Committee Chair and Professor of Medicine, Adjunct Prof in Agriculture Life and Environmental Sciences, University of Alberta*
- 4:30 PM Joint Networking Session

Speaker slide presentations and videos are available through the CNS and ILSI North America websites:

www.cns-scn.ca

www.ilsi.org/NorthAmerica/Pages/HomePage.aspx

SPEAKER PRESENTATION HIGHLIGHTS (See Appendix A for Speaker Biosketches)

Keynote Presentation: Why Food Now: The Challenge of Feeding Nine Billion

Dennis Dimick, BS. MS, Executive Editor, Environment, National Geographic Magazine

Mr. Dennis Dimick began his presentation by explaining the National Geographic monthly series ‘*Why Food Now?*’ that covers a variety of topics related to the importance of food and agriculture, and challenges we are facing in providing proper nutrition to a growing world population.

The presentation discussed several issues impacting agriculture and food today, including urbanization, deforestation, global warming, climate change, energy demands, extreme weather, rising sea levels, world population growth, and how these are all connected. Mr. Dimick further elaborated on the changes occurring in the world that are altering agriculture and food, including the rising population, increased meat consumption, rising aspirations and expectations, and environmental changes such as deforestation, carbon emissions and drought. He emphasized that there is a need to start conversations with the general public who are unaware of these issues, not just with the experts. National Geographic is a tool for this type of awareness raising.

The issue of how to feed the growing population is complex, and Mr. Dimick discussed some of the components of the problem and solutions including:

- Use of both industrial and small scale farming
- Becoming more efficient in food production (create more food with same resources)
- Change dietary patterns and habits. Can we afford for everyone to eat meat seven days/week from an environmental and health standpoint?
- Reduce food waste and harvest loss
- Evolution of diets and culture of food
- Use of biotechnology and GMO foods, and communicating potential benefits to consumers
- Understanding the complexity of food insecurity in North America and world wide
- Need population to understand the importance of food, and the huge role it plays in our culture

In order to evoke change and create interest in the topic of food and health, National Geographic communicated the information in a novel story, focusing throughout their food series on showing consumers where their food comes from, and reconnecting readers with the farmers and producers who are providing their food. People need to understand the importance of food, and where their food comes from.

Future areas of interest for National Geographic in this series include food culture, pollination, the science of taste, food waste, food labour, vanishing aquifers and the history and origins of agriculture. Mr. Dimick ended his presentation by showing the short National Geographic video Food by the Numbers, a successful knowledge translation tool (<https://www.youtube.com/watch?v=CB9Enh6yP0w>).

Why “Just the Facts” Misses the Mark: Trust Building through the Art of Values-Based Science Communication

Roxi Beck, BA, Director, Center for Food Integrity

Ms. Roxi Beck introduced the topic of consumer mistrust and skepticism towards the food system, and communication models and skills to regain trust. The Centre for Food Integrity (CFI) focuses on this through researching consumer opinions, disseminating that research to individuals within the food system, and developing programs to communicate and gain trust.

There are many factors that have led to mistrust in the food industry. The year 1968 was a turning point due to social change, the Vietnam war being broadcast into homes, assassinations of Martin Luther King Jr and Bobby Kennedy, and the green movement. This all led to a decline in trust of institutions. Prior to 1968, authority was granted by office, there was broad social consensus (driven by WASP males), communication was formal and indirect (mass communication), and progress in science and technology was inevitable. Now authority is granted by relationships, there is great diversity and no single social consensus, communication is informal and direct (masses of communicators), and progress is possible (society is unsure if we should be pursuing certain science and technology paths). There are many compounding factors influencing the mistrust, including the public sensing change in the food system but not understanding why, the fact that food is necessary, media focusing on dramatic stories, social media amplifying issues, and online influencers skewing information.

The CFI has created a Trust Model to address these issues. The first step was identifying what drives trust. These factors include confidence (similar values), competence (science, facts), and influential others (social circles, health professionals). Of the three factors, values were 3-5 times more important than facts for building trust, showing relationships need to be built through values before the facts will be considered.

CFI has established that sustainable systems must be ethically grounded (compassion, responsibility, respect, truth), scientifically verified (data driven, repeatable, measurable, specific) and economically viable (ROI, cost control, efficiency). While scientifically verified and economically viable factors address knowledge, ethically grounded factors address feelings and beliefs. The questions asked are often ethical (should I eat that?), not the knowledge questions (can I eat that?). When we only give the science and facts, we aren't addressing feelings and beliefs, and everything needs to be grounded in the ethics piece.

Transparency is also important in trust building. There are seven main drivers of transparency: motivation (why are you doing it?), disclosure (have you communicated everything?), stakeholder participation (involving public in process?), relevance (is it relevant to consumer?), clarity (concise, clear, compelling, and accessible), accuracy, and credibility (track record).

From CFI's 2014 survey (focused on antibiotic use in food and GMO), university scientists and scientists that are also moms were the most trusted for information related to genetically modified (GM) Foods, while food-bloggers, Dr. Oz and celebrity chefs were the least trusted sources of information. This emphasizes the need for the scientists to be the voice behind the message. Websites were the most common place for consumers to first look for food system information, followed by local news, friends and family not online, and google.

In order to engage efficiently and regain trust, there are three steps: Listen for values driving the concern without judgement, ask questions to invite dialogue and clarify, and explain your perspective through shared values. Consumers need our help to trust the food system, and it's important to remember that science doesn't explain everything, there is a need to communicate in a way that embraces skepticism, and that food system professionals are positioned to connect with consumers.

Health Check: Lessons Learned from a Pioneering Front-of-Pack Nutrition Label Program

Jeff Sommers, PhD, Manager of Research and Health Initiatives (BC & Yukon) and Director of Knowledge Exchange, Heart & Stroke Foundation Canada

Dr. Jeff Sommers provided comments on the importance of food in our lives – for both health and quality of life. Some of the first major movements in food for health were Ancel Keys' publication ***Eat Well and Stay Well***, which laid the foundation for what we know about dietary fats and cholesterol (although that is now changing), and Lewis Dahl who confirmed the relationship between sodium and hypertension (although this is also presently up for debate).

The Heart & Stroke Foundation of Canada's Health Check program was a Front of Pack (FOP) label system launched in 1999 and concluded in 2014, with the goal of improving the health of Canadians by changing the food supply. The program has a technical advisory group made up of nutrition experts who helped develop the criteria, based on the Canada Food Guide, for eligibility of products for the Health Check program. This criteria was the basis for a computer algorithm which determined product eligibility. The program also had independent verification and random checks. The Heart & Stroke Foundation did not make any money off the program, but did charge a licensing fee to cover costs.

There were several challenges facing the launch of the program, including:

- Regulatory Challenges: Initially the program wanted to provide 1, 2, or 3 checks but Health Canada would not allow this as it implied a health claim, resulting in the '1 check program'
- Stakeholder consultation: Unlike the program in Australia, the Canadian program sought buy in from industry before launching, which was a long and slow process
- Early pushback: Some thought criteria was too stringent while others thought not stringent enough
- Few products qualified: At the time only 10% of products were eligible for the Health Check
- Low uptake at first

Throughout the lifespan of the program, Health Check had many accomplishments. Prior to the launch of the Health Check program there was no mandatory Nutrition Facts table (NFt) in Canada, and after implementation of the NFt the Health Check program really grew with widespread participation across Canada. The program did generate change in the food supply, with industry changing formulations of products and introducing new healthier products. The Health Check program also was a pioneer in the social media sphere which generated consumer engagement, through blogs, twitter, Facebook, online recipes and more. Finally there was significant brand awareness, with 86% of Canadians recognizing the Health Check logo.

Although successful, there were many changes in the food system environment since the launch of the program in the late 1990's. In the last 30 years our diets have significantly evolved to foods and meals providing more flavour and salt. There has been an increase in community gardens and awareness of ethical food labour. Food and cooking has become more popular, evident by the growing number of food based television shows, and there has been an increase in male interest in cooking. There has been a local food movement and huge increase in farmers markets. For Health Check the CBC Marketplace television program '*Busted*' segment that focused on the Health Check program opened the eyes of the Heart & Stroke Foundation and indicated a change was needed.

Through the Health Check program, there have been many lessons learned. Regulations matter, and the mandatory NfT boosted Health Check participation. The proliferation of Front of Pack (FOP) systems (158 in Canada alone) makes it difficult to cut through the noise, Health Check was just one in the sea of logos on a product. Often simple is better, as it's difficult to explain the complicated algorithm that determines eligibility, and this loses consumer trust in the program. The relationship between label and organizational brand is important, and if the logo program loses trust it will begin to cause a decline in the trust of the organization. A program can't undermine the trust of the brand. And finally that context matters – the Health Check program was outpaced by development and consumer expectations, and you need to change and evolve to keep up.

Nutrition Communication in Retail: Loblaw's Role in Promoting Healthier Food Choices for Canadians

Samara Foisy, RD, MHSc, Senior Manager Dietitian-Product Development, Loblaw Brands Limited

Ms. Foisy began with an overview of the Loblaw Companies Limited, Canada's largest food retailer with 140,000 full-time and part-time employees and more than 2,300 stores across Canada. Loblaw has several brands, including three of Canada's top consumer brands – Life Brand, no name, and President's Choice. The philosophy across Loblaw stores and brands is: taking something good and making it better.

Loblaw's has made nutrition communication an important part of their company stores and products, and believes nutrition communication is needed in retail, as this is where consumers are purchasing their food and where messages can have powerful effects on their understanding, their behaviours and their well-being. The demand for nutrition information has grown exponentially, reflected by the huge volume of media coverage on health and nutrition. Despite the vast amount of information out there, consumers are often confused due to competing and conflicting messages, making purchasing decisions difficult. Manufacturers and retailers need to make it easier for consumers to cut through the clutter and make informed decisions by in store communications, signage and package claims, to help guide the public to healthy foods.

There are many challenges in accomplishing effective nutrition communication and eliciting healthier purchasing decision including:

- Communication doesn't necessarily result in behaviour changes: Consumers may have preconceived notions that are hard to challenge, may not respond to messaging, or may want to be healthier but don't choose healthier items

- Communicating the science effectively with a simple message: science needs to be distilled down to a simple message to show how food choices impact lives
- Limited space to relay messages and regulatory limitations
- Reaching diverse consumer sets with the same messaging: Not all consumers are the same and one message may not resonate with all groups
- Establishing trust with consumers

Loblaw's has addressed these challenges and has taken several approaches to reduce consumer confusion and hopefully lead to healthier food choices. The first approach is their healthier product line, originally called 'Too Good To Be True'. This brand includes functional foods to target health conscious consumers. The brand was created with the help of Dr. David Jenkins at the University of Toronto, and the objectives were to meet as many functional attributes as possible, exceed national brand nutrition profiles, and communicate the healthy features to consumers. The brand has now evolved into PC Blue Menu, which continues to target health conscious consumers with innovative foods and are easy and convenient. The evolution to Blue Menu occurred to simplify and improve nutrition messaging, which wasn't as clear with the Too Good To Be True products. Blue Menu continues to evolve, with messaging becoming even more simplified (such as up and down arrows for higher in and lower in), new packaging to emphasize nutritional benefits, and approximately 100 new products. In 2015 there are over 350 PC Blue Menu products.

Another Loblaw's nutrition communication initiative is Guiding Stars, a program to simplify nutrition at the point of purchase by guiding consumers towards healthier food choices and allowing comparison within and across categories. The program rates food based on nutrient density using an algorithm to generate a 0, 1, 2, or 3 star rating. Foods are awarded points for positive nutrients (vitamins, minerals, dietary fibre, whole grains, omega-3 fatty acids) and debited points for negative nutrients (saturated and trans fats, added sodium, added sugars). The stars are then marked on the shelf tags in store. To ensure consistent messaging, PC Blue Menu items will always carry the same stars or more than equivalent products to align the two approaches and create a unified message.

A third Loblaw's nutrition communication initiative is the in store dietitians, with 66 dietitians in 160 stores primarily focused in Ontario and Atlantic provinces. Their services include nutrition check-ups (assessments and consultations 1:1 with customers), customer cooking classes, grocery store tours, demonstrations, wellness care (programming delivered in partnership with pharmacy), and community connections. Loblaw's also has many food and nutrition communication vehicles including their website, recipes, cooking classes, videos and menu plans.

Through their initiative, there have been several lessons learned about nutrition communication. Messages need to be simple (wording and graphics), easy to understand, accurate, consistent, and delivered repetitively. Additionally, multiple vehicles and formats to deliver the messages allow it to resonate with multiple target groups, as well as flexibility with messaging. Lastly, messaging needs to be balanced, so nutrition communication of healthy products is balanced with communication overall.

Knowledge Translation for Researchers and Clinicians: The Experience of the Canadian Malnutrition Task Force

Heather Keller, PhD, RD, FDC, Professor, Research Chair and Chair, University of Waterloo, Canadian Malnutrition Task Force

Dr. Heather Keller introduced the Canadian Malnutrition Task Force (CMTF) as an example of a successful Public-Private Partnership between clinicians, researchers, industry and non-profit partners (including CNS) with the goal of reducing malnutrition and advancing nutrition care in Canada. Her presentation, using the CMTF as an example, discussed what Knowledge Translation (KT) is, why it is needed, the needs and strengths of the public and private sides of PPP in KT, and what is needed to build and sustain PPPs.

As defined by CIHR, KT is dynamic and iterative, a synthesis, dissemination and exchange of knowledge, is ethically-sound, and is done to improve the health of Canadians. The process of translating knowledge to action involves the knowledge creation cycle (knowledge inquiry and synthesis) and the action cycle (adapt knowledge to local context, assess barriers to knowledge use, select, tailor and implement interventions, monitor knowledge use, evaluate outcomes, and sustain knowledge use). There is a need for researchers and clinicians to be involved in KT as it benefits the populace that provides the funding, they are in a position to actually evoke and see change stemming from the knowledge synthesis, funding often contains a KT specific component, funders are increasingly requiring commitment from stakeholders, and if KT is successful it stimulates further research. When discussing KT, researchers often think of the typical avenues for disseminating their research (presentations, scientific journals, lectures, textbooks, publicity and social media), and private businesses view it as 'marketing'.

From the perspective of CMTF, PPP KT is the coming together of the scientific product (research, studies), publicity (non-profit partners such as CNS) and marketing (industry partners). The 'story' of CMTF began in 2009 at a workshop, and became a standing committee in CNS in 2010. Research began and data was collected from 2010-2013 (funded by private partners). The KT took off with development of a website and grand rounds to discuss results. CMTF is now being refocused to be more KT focused. The CMTF is investigator driven KT research, it received a catalyst grant in 2014-2015 to create tools to address and track barriers to food intake, and a strategic impact grant 2015-2017 to test the impact of the tools. The projects have benefited greatly from being PPP specific to KT.

Over the past 5 years, CMTF has focused on many KT activities including both push (website, e-newsletters, presentations and PR campaigns) and pull (allow patients to share stories, discuss needs at grand rounds, industry reps, stakeholder meetings) initiatives. They have established a variety of KT products including re-purposing research tools (patient access/satisfaction questionnaires, physician/nurse surveys), digested evidence (article precis, review of screening tools), creating KT products as research (Canadian nutrition screening tool, mealtime audit tool, meal intake tool) and reframing clinical tools (video updates relevant to practitioners).

The private partner and researchers/clinicians have different strengths and needs related to PPPs and KT, and these should be considered and understood in order to have successful KT from PPPs. Private partners need a business opportunity to grow brand and sales, they need the work to be time

sensitive, they aim to build client loyalty and improve relationships with consumers, are looking to obtain fresh material for marketing, and have access to experts and key opinion leaders. Their strengths are the number of employees (sales force, communications), access points and dissemination venues, skills in marketing, sales, and packaging knowledge products, business contacts and the network of decision makers.

Researchers and clinicians have different needs out of a PPP, including the need to publish, scientific freedom, funding support, expertise in the packaging of the knowledge they create, and an understanding that research and publication is a slow process. The researchers and clinicians benefit the PPP by providing knowledge of the content area, expertise in conducting research, credibility, and a network of researchers/clinicians with similar interest.

The CMTF has identified several factors to build and sustain PPP, including:

- Need to find partners with similar agendas
- Relationship has to be mutually beneficial and considered long term by both partners
- Trust (Identify and minimize conflict of interest, transparency)
- Professional team liaison with private partner (communicated with commercial team frequently to ensure continued commitment)
- Create clearly defined and achievable goals
- Understand partners needs and strengths
- Communicate- Figure out who and how, frequent updates, transparent
- Flexible and adaptable

In her summary, Dr. Keller highlighted that KT from PPP is worthwhile, it takes time, hard work and allows the development of new skills, and is necessary to truly impact important health care issues.

Knowledge Translation to Producers

Peter Jones, PhD, Director and Professor, Richardson Centre for Functional Foods and Nutraceuticals, Manitoba Agri-Health Research Network, University of Manitoba

Dr. Peter Jones brought a local context to the knowledge translation discussion of the workshop. He is based out of Winnipeg and works at the Richardson Centre for Functional Foods and Nutraceuticals (RCFFN), and chairs the board of the Manitoba Agri-Health Research Network (MAHRN). The focus of his talk was highlighting how MAHRN functions and translated knowledge to multiple groups, including producers.

MAHRN is anchored with the growers and producers, and brings together innovative retailers, University of Manitoba's Food Sciences, Human Nutritional Sciences, Asper School of Business, Manitoba companies, Food Development Centre (FDC), Richardson Centre for Functional Foods and Nutraceuticals (RCFFN), Canadian Centre for Agri-Food Research in Health and Medicine (CCARM), and Manitoba Agriculture, Food and Rural Development (MAFRD). Manitoba is a fantastic place for agriculture and business, as it has strategic transport links, generous R&D credits, world class research infrastructure, clean energy, and a knowledgeable skilled workforce. Manitoba has diverse commodities (canola, hogs, wheat, cattle, dairy, potatoes, oats, poultry, eggs, legumes, flax, buckwheat, hemp, barley) with 1/10 jobs serving agri-food and 23% of total manufacturing output is food processing.

MAHRN is needed to support research, development and commercialization of Manitoba grown and processed plant and animal bioactives as functional foods, food ingredients and Natural Health Products. MAHRN focuses on communication, facilitation, brokerage and coordination. MAHRN also supports key Manitoba goals of promoting health and wellness, rural economic development, brings value to the farm gate, commercialization, building partnerships (PPP), and leveraging existing infrastructure.

There are several components to MAHRN, with the three main ones being the Canadian Centre for Agri-Food Research in Health and Medicine (CCARM), Richardson Centre for Functional Foods and Nutraceuticals (RCFFN), and the Food Development Centre (FDC). CCARM is affiliated with St-Boniface teaching hospital, and focuses on bench to bedside. Here researchers and clinicians work with patients, and the focus is research and academia. FDC facilitates product scale up, packaging, branding and works with producers, with the focus being commercialization. Finally RCFFN had both a focus in the academics and commercialization with research and industry partnerships. RCFFN focuses on Discovery (research), Development (new food products), Discussion (knowledge translation) and Devour (taste of products).

MAHRN's main competencies are taking raw materials (crops) and superimposing them with health and disease expertise (researchers) to create new functional food and nutraceutical products. To date MAHRN has successfully creating a wide array of products including pulse protein formulations, vegetable-animal protein powders, pinto bean-buckwheat flour, healthy extruded pulse snacks, virgin canola oil, barley chips, emulsified meats, soy spreads, carrot powder and berry frozen desserts. MAHRN is an innovative model that has led to innovative partnerships. MAHRN Inc. also has several umbrella organizations which allow for further product development, including NuEats, which pressure tests products through micro-commercialization, several Functional Food Incs which characterize, produce and market bioactives and fractions from Manitoba-grown and processed crops, and TM Therapeutics which focuses on dosed nutritional therapy. MAHRN also has created the Canadian climate advantage diet that provides health, economic and environmental benefits.

In summary, MAHRN has played a key role in coordinating and showcasing Manitoba's role in the functional food industry. Through partnerships and collaborations, MAHRN brings together comprehensive capacities and skill sets to enable efficacy and safety testing and marketing of food based bioactives.

Finding the Right Fit: Opportunities and Requirements of the Networks of Centres of Excellence Programming

Fouad Elgindy, BSc, Senior Program Manager, Networks of Centres of Excellence

Mr. Fouad Elgindy began with the mandate of the Networks of Centres of Excellence (NCE), to mobilize Canada's research talent in the academic private and public sectors, and apply it to the task of developing the economy and improving the quality of life of Canadians. The NCE has created several program elements from this mandate, and achieve it through stimulating leading edge research in areas of importance to Canada, building on nationwide and international partnerships, developing and

retaining world-class research and research translation capabilities, creating innovative knowledge and technology transfer opportunities and mechanisms, managing research resources and programs, focusing on key social and economic challenges commercializing and applying more home-grown research breakthroughs, increasing private-sector R&D, and training highly qualified people (HQP).

The NCE brings together the three granting agencies (NSERC, CIHR, SSHRC) to work collaboratively, along with Industry Canada and Health Canada. The steering committee consists of the presidents of the three granting agencies, and the Deputy Ministers of Industry Canada and Health Canada. The NCE was established in 1989 and has had several other programs stemming from it, including the Knowledge Mobilization Initiative, Centres of Excellence for Commercialization and Research, Business-led Networks of Centres of Excellence, and Industrial R&D Internship programs. These programs cover the innovation continuum in Canada, beginning with the funding agencies that help create the networks, solutions driven research (early stage, successful results and knowledge synthesis) through to Knowledge Translation (mobilization, commercialization, private sector implementation and optimization, and prototype development).

The NCE program currently has 14 active networks, and covers the early stages of the innovation continuum (early stage research through to beginning of knowledge translation). The NCE builds a network of researchers across Canada that work together to solve a problem with a multi-disciplinary team, engaging partners from multiple academic institutions, industry, government and NGOs, training HQP, working with end users to put new knowledge to use quickly, and increasing collaboration between researchers in Canada and abroad. The average award for an NCE is \$54 million over the life of the network, with an average of \$35 million in contribution. An NCE works through the support of the contributors and administrative staff, to produce research from cross thematic collaborations, put the research results together into outcomes, and begin the knowledge mobilization through contributors and stakeholders. The NCE program has five main criteria which are all equally weighted, including Management and Governance, Networking and Partnerships, Excellence of Research, HPQ Development, and Knowledge and Technology Exchange and Exploitation. The NCE program is highly competitive, with the 2015 competition having 83 Letters of Intent, 10 full applications, and 4 funded networks.

The Business-led NCE (BL-NCE) program currently has five active networks and covers the innovation continuum from successful results to the mid-point of knowledge translation. The BL-NCEs help industry meet their R&D needs by responding directly to problems identified by Canadian industrial sector, allowing networks to fund private sector partners directly so they can conduct research at their own facilities, increasing private-sector investments in Canadian research, supporting the training of the next generation of skilled researchers, creating, growing and retaining companies whose innovations can capture new markets, and accelerating the translation of research into commercial products and services. This program is aimed at solving common private sector challenges over the next 5-10 years, private sector is eligible for the grants, it is renewable once for an additional 5 years, and requires matched funding. The most recent competition received 33 letters of intent, 8 full applications and 4 funded networks averaging \$12.4 million each over 5 years.

The NCE-Knowledge Mobilization initiative currently has five active networks, and covers the innovation continuum from knowledge synthesis through the majority of knowledge translation

activities. Knowledge is transferred to end users by supporting national and international networks between knowledge users and producers for the benefit of Canada's social, health and/or economic development, and enabling knowledge mobilization activities that will bring together researchers from different disciplines to share and nurture ideas and methods that challenge research. The average KM network is awarded \$1.2 million over its term with a similar amount in outside contributions. The most recent competition had 86 letters of intent, seven full applications and two funded network. Applications for this program have a lot of area for improvement, as many miss the knowledge translation focus.

The Centres of Excellence for Commercialization and Research (CECR) currently has 23 active centres, and focuses entirely on the knowledge translation component of the innovation continuum. The CECR accelerates commercialization by facilitating partnerships and collaborations, providing access to research expertise and equipment, building regional clusters of technological excellence, training and mentoring entrepreneurs, incubating start-ups, offering flexible business models tailored to the needs of each industry sector, and advancing research and adding value to technology. The CECRs are regionally focussed, require matched funding, and must achieve sustainability within the grant term. The most recent competition received 34 letters of intent, 11 full applications, and had five funded centres, averaging \$13.6 million over five years per centre.

For all NCE programs, there are three pieces of advice that Mr. Elgindy imparted on the audience:

1. Engage partners early, and have ideas and traction established. This will show you have a novel and in demand program.
2. Think ahead, and start planning at least 1 year before competitions are announced.
3. Engage the NCE and get support for your applications.

Building a Platform for Public Private Partnerships: Update from 2014 Food for Health Initiative

Eric Hentges, PhD, Executive Director, ILSI North America

Dr. Hentges emphasized the importance of public-private partnerships to ILSI North America, and what a pleasure it has been to be involved with the Food for Health (FFH) workshop for a second year focusing on these food and health PPPs. In the planning of these workshops, there was a desire to have a tangible Food for Health deliverable, and last year this was a focus in the breakout sessions. The 2014 FFH workshop participants expressed the need for a web-based tool to assist researchers, industry, government, and NGO personnel in establishing and coordinating food and health PPPs. Over the past year the FFH committee has focused on this and has made a connection with the University of Guelph Food Map team, who have created an innovative catalogue of University of Guelph food-related researchers, indexed and categorized, allowing quick access to specific research topics, projects and themes.

The Food Map: Repurposing Research Information and Research Data for Maximum Benefit

Wayne Johnston, MLIS, Head of Research Enterprise and Scholarly Communications, University of Guelph Library

Mr. Johnston introduced the concept of the Food Map, which is essentially a web-accessible catalogue of all the food-related research happening at the University of Guelph. The purpose for this tool was to take the amazing University of Guelph food research accomplishments out of the ivory tower, and into the hands of the public, private industry, media, and anyone who may see value in the research. The Food Map also brokers relationships between those who need innovative solutions and those with the expertise to develop those solutions, and from this new knowledge will be generated. The Food Map was an initiative spearheaded by Dr. Rickey Yada and is a collaboration between the University of Guelph library and the Food Institute. Currently Dr. Rene Van Acker heads the project, and Mr. Johnston continued with a short video from Dr. Van Acker.

In his video overview of the Food Map, Dr. Van Acker covered several questions surrounding the Food Map:

- *What is the Food Map?* The Food Map is a tool intended to connect researchers to industry, and vice versa. This allows industry to solve problems and grow their business.
- *How does the Food Map enable collaboration?* Industry can use the Food Map to find researchers at the University on a specific topic or project of interest to the company. The tool provides contact information, so industry and public can directly contact researchers and begin discussions on using successful results or engaging in further research together.
- *How will the Food Map evolve in the future?* The team is very interested in partnerships, so open to discussion and working together with other companies and organizations on how to grow the Food Map. There is a lot of potential for this tool to help the sector grow, and the Food Map is looking for those partnerships.

Mr. Johnston continued with showing how the Food Map works and what it looks like. The Food Map is in its infancy, launching November 2014, and is currently a proof-of-concept that they hope to use as a launching pad for further growth. Mr. Johnston continued to illustrate how the Food Map can be used with four case-examples: a greenhouse gardener having issues with the short growing season connecting with a researcher who provided strategies for extending greenhouse growing seasons, a researcher on Ontario wine looking to optimize by-products of the wine establishing a research partnership with a Guelph researcher on grape pomace for the treatment of insulin resistance and diabetes, a reporter contacting a Guelph researcher studying giant ragweed glyphosate-resistance and setting up an interview on national news about the research, and a food company looking to create a healthy low-fat version of their product without sacrificing texture finding and working with Guelph researchers to create a better product.

Mr. Johnston continued with the strategy used to populate the Food Map, which uses several data sources being pulled into one centralized storage. By pulling from other sources and repurposing data, the Food Map avoids putting the workload on the researchers to update and populate the information. The Food Map identifies sources of data, harvests the data, pull the data sources automatically on a weekly basis to ensure up to date, and link out to scholarly articles and raw data associated with projects. There is still opportunity for primary researchers to update entries manually. The Food Map uses the USDA National Agriculture Library Thesaurus to enhance searchability and retrievability of the Food Map and establish key research themes. The Food Map also has several links out from the Food Map, including a data repository enabling quick access to the projects raw data to allow further analysis, verification or other applications, and the institutional repository that includes any scholarly

output resulting from research project. Mr. Johnston concluded by re-emphasizing that the Food Map is open to growing and expanding, and to contact the Food Map if you wish to get involved.

Key Conclusions from the Breakout Session Discussions

Breakout groups were assigned to respond to the questions shown below; there were a total of four breakout groups with a mix of attendees from the academic, industry and government sectors. Each breakout group was assigned to one of the four questions. Breakout group assignments can be found in Appendix C. Following group discussion, one participant from each breakout group reported on their group's discussion to the audience as a whole. Key points made in each response are shown below.

1. After listening to the morning and afternoon speakers, reflect upon what you believe are the key barriers to address in making PPP activities in knowledge translation successful. Consider the perspective of public vs private.

- Intellectual Property
- Lack of trust in food industry
- Perceived Conflict of Interest
- Timing (industry if fast, academia is slow)
- Finding partnerships

2. Think upon what you believe are key opportunities (projects i.e. nutrition literacy campaign) for PPP activities in knowledge translation. Such projects would only be possible with contributions from all sectors. Consider the perspective of academia, government, NGO and industry.

- Opportunity for better understanding of food intake and dietary patterns
- Opportunities to drive policy and product development
- Increase the use of data and mileage out of data
- Credible information more accessible
- Children's health

3. Last year's workshop identified the need for a tool to enable participants to connect such as a "match-making" web-portal. The session on the Food Map project is such a tool. Discuss further the attributes that you find potentially useful or needed to make the Food Map a premier "match-making" tool for enabling PPP.

- The tool is a good idea and like having the information all in one place
- It needs to be bi-directional
- Needs to connect in granting agencies/opportunities
- Should connect with commodity groups
- Could potentially link in with CNS to be a membership benefit
- There needs to be a health connection
- Is this information already available?
- Could increase Canadian focus and opportunities
- This only addresses lack of information, which most is already available. It doesn't address other barriers such as timing and intellectual property

- Does this help with the KT aspect or only in establishing a partnership?
- Might work better as a trainee tool
- Could house commercial information (consumer research)

4. What role can CNS play in facilitating knowledge translation in PPP?

- CNS is already very active in facilitating PPP
- Facilitate connections and diminish stigma
- Member inventory might help
- Researchers want to connect with companies, and CNS can help
- Event for graduate students/trainees (at CNS annual meeting) should focus on PPP

Robert Bertolo, PhD
CNS-SCN President and Associate Professor, Department of Biochemistry
Memorial University of Newfoundland

Dr. Robert Bertolo has been with the Department of Biochemistry at Memorial University of Newfoundland since 2002. He trained at the Universities of Guelph and Alberta studying nutrition and metabolism during development with a focus on amino acid and protein nutrition. As an Associate Professor of Nutrition and Metabolism and Canada Research Chair in Human Nutrition, his current research involves the neonatal use of amino acids for growth and non-growth requirements.

Recently, Dr. Bertolo has developed the miniature pig as a model for the early origins of adult disease and was the recipient of the International Life Sciences Institute (North America) Future Leader Award for work in this area. In particular, he is interested in how neonatal nutrition and methyl metabolism affect programming of gene expression that can eventually lead to higher risk for developing obesity and hypertension. From a nutritional perspective, he is interested in how much methionine is needed to maintain growth and methylation demands and which pathways take priority when nutrition is inadequate. Dr. Bertolo also has research programs on amino acid requirements during intestinal stress such as in parenteral feeding. He has received funding from CIHR, NSERC, CFI, hospital foundations and industry to support this research and has served on several grants review panels in Canada and USA. Dr. Bertolo is also actively engaged in nutrition outreach and student development and is currently the President of the Canadian Nutrition Society.

Dr. David Ma, PhD
CNS-SCN Advocacy Committee Executive and Associate Professor
University of Guelph

Dr. David Ma obtained his PhD in Medical Sciences in 2001 at the University of Alberta conducting research on the anticancer properties of ruminant fats, specifically, conjugated linoleic acids in breast cancer. He did postdoctoral research at Texas A&M University investigating the role of omega-3 fatty acids and folate in colon cancer. Returning to Canada in 2004, he joined the Department of Nutritional Sciences at the University of Toronto as an Assistant Professor, before moving on to the Department of Human Health and Nutritional Sciences at the University of Guelph in 2007 where he is currently an Associate Professor.

Dr. Ma's research encompasses investigations to better understand the role of fats in human health and disease. In particular, the role of bioactive fatty acids including, omega-3's, trans fats and CLA have been the focus of research investigations. Broadly, studies seek to enhance our understanding of the role of fats through the lifecycle from conception to later years in life and how various fats may impact on the maintenance, prevention, and treatment of chronic diseases. Studies also seek to understand the fundamental nature by which fats and other lipids 1) affect cellular biology, 2) have utility as disease markers, and 3) the how individual genetic differences involved in fat metabolism modify disease risk. Current studies are focused on: 1) How omega-3 fatty acids may play a role in breast cancer prevention; 2) Role of individual omega-3 fatty acids on metabolism and health; 3) Effect of genetic variation in genes involved in omega-3 and omega-6 fatty acid metabolism on health

Leah Gramlich, MD, FRCPC
CNS-SCN Advocacy Committee Chair and Professor of Medicine
University of Alberta

Dr. Leah Gramlich is a physician nutritionist specialist and Gastroenterologist. She is a Professor in the Faculty of Medicine and department of Medicine at the University of Alberta with a cross appointment in Agriculture Life and Environmental Science. She is also Provincial Medical Advisor for Nutrition services in Alberta Health Services.

Dr. Gramlich is dedicated to patient care and has an evolving interest in food for health and in empowering health practitioners with the tools to meet patient needs relative to food and activity for health. Her other research interests include nutrition and cancer, nutrition in critical illness, Nutrition therapy in the home and nutrition education. She is past president and founding president of the Canadian Nutrition Society. She sits on several committees in the Canadian Nutrition Society, the American Society for Parenteral and Enteral Nutrition and the European Society for Nutrition and Metabolism.

Mr. Dennis Dimick, BS, MS
Executive Editor, Environment
National Geographic Magazine

Dennis Dimick serves as executive environment editor at *National Geographic* magazine and has guided creation of several major projects including an April 2010 issue on global freshwater, a 2011 series called “7 Billion” on global population, and the 2014 Future of Food series on global food security. In 2014 he also originated and edited major stories on the role of coal in the world’s energy future, and on snowpack decline in the Western United States. Dimick co-organized the Aspen Environment Forum from 2008-2012, and regularly presents slide show lectures on global environmental issues. He grew up on a sheep and hay farm in Oregon, and in his youth was a member of 4-H and Future Farmers of America. Dimick holds degrees in agriculture and agricultural journalism from Oregon State University and the University of Wisconsin-Madison.

Ms. Roxi Beck, BA
Director, The Center for Food Integrity

As director for The Center for Food Integrity, Roxi Beck brings over a decade of experience working with clients across several sectors of the food system including food companies, production agriculture, education, financial providers and governmental agencies. Whether research, communications training, content generation, media monitoring or online strategic outreach and engagement, her work at CFI focuses almost exclusively on directing strategy and activities for consumer-facing initiatives related to food.

After 17 years on her family’s dairy farm in Minnesota, where she drank whole milk and tended to her own barn of calves daily, Roxi received bachelor’s degrees in psychology and public relations from Coe College in Cedar Rapids, Iowa. She and her prince charming married and moved to Des Moines where Roxi joined Osborn Barr as an account executive. Roxi currently serves on the advisory board for Iowa State University’s Agricultural Entrepreneurship Initiative, is a graduate of the Greater Des Moines Leadership Institute, is a member of the Public Relations Society of America

and has served as president of the National Agri-Marketing Association. As a mom of two, Roxi's passion for food in the office meets the necessity of good nutrition and an active lifestyle at home.

Dr. Jeff Sommers, PhD

***Manager, Research and Health Initiatives, BC & Yukon, Heart and Stroke Foundation
Director, Knowledge Exchange, Canada, Heart and Stroke Foundation***

Jeff Sommers is the Director of Knowledge Exchange at the Heart and Stroke Foundation of Canada. Before joining the Foundation in 2007, he was the principal investigator at the Strathcona Research Group in Vancouver where he led local and national projects looking at a wide range of social issues.

Ms. Samara Foisy, RD, MHSc

Senior Manager, Dietitian- Product Development, Loblaw's Co. Ltd.

Samara Foisy is a registered dietitian with Loblaw Brands. She holds a Master of Health Science in Community Nutrition from the University of Toronto and has been practicing dietetics for 8 years. Samara's previous experience resides with non-governmental associations such as Health Check and the Nutrition Resource Centre where she worked with a variety of government and public health stakeholders in the province who are committed to improving the health of Ontarians.

Dr. Heather Keller, PhD, RD, FDC

***Professor and Research Chair, University of Waterloo
Chair, Canadian Malnutrition Task Force***

Heather Keller is a dietitian and nutritional epidemiologist. As a scientist and research chair with the Schlegel-University of Waterloo Research Institute for Aging she conducts research in community, long term care and hospital sectors focused on the nutritional health and care processes for older adults. She is the Chair of the Canadian Malnutrition Task Force, which is leading the Canadian research and healthcare communities towards improved nutrition care practices in hospitals. Knowledge translation and implementation of science into practice are areas of expertise.

Dr. Peter Jones, PhD

***Director, Richardson Centre for Functional Food and Nutraceuticals
Professor, University of Manitoba***

Peter Jones, Canada Research Chair in Functional Foods and Nutrition, joined the University of Manitoba in 2005 as Director of the Richardson Centre for Functional Foods and Nutraceuticals. He received his BSc in Biochemistry and MSc in Human Nutrition from the University of British Columbia, and completed a PhD in Nutritional Biochemistry at the University of Toronto. Dr. Jones was previously a faculty member with the Division of Human Nutrition at UBC and Director of the School of Dietetics and Human Nutrition at McGill University. Peter has held numerous positions on institutes and societies including the Danone Institute for Nutrition in Canada, Canadian Society for Nutritional Sciences, United Nations, and the World Health Organization, as well as serving on grant review committees and editorial boards for international nutrition journals.

Mr. Fouad Elgindy, BSc
Senior Program Manager, Networks of Centres of Excellence

For the past 7 years, Fouad Elgindy has worked at the Networks of Centres of Excellence (NCE) Secretariat where he holds the title of Senior Program Manager and manages a portfolio of recipient clients for the Government of Canada. In his time with the NCE, he has created over \$60 million in programming, directed competitions soliciting over \$250 million in requests and participated as the NCE Liaison on over a dozen Boards of Directors. He is a strong proponent of governance and is well versed in the subject as it relates to Canadian not for profits. Prior to his role with the NCE Secretariat, Fouad spent five years at an NCE Network based out of the University of Guelph.

Dr. Eric Hentges, PhD
Executive Director, ILSI North America

Dr. Eric Hentges joined the North American Branch of the International Life Science Institute as the Executive Director in 2007. He works closely with ILSI North America members, trustees, science advisors, and staff to enhance the organization's programs and the impact of its scientific output.

Dr. Hentges brought over 25 years of prior experience in nutrition research and education to ILSI North America. He has directed strategic research priority planning and administration of competitive research grant programs for several organizations. Additionally, he has directed the development and implementation of nutrition education programs and consumer market research programs.

Previously he served as the Executive Director of the U.S. Department of Agriculture's, Center for Nutrition Policy and Promotion. In this position he had oversight of the USDA's involvement in the development of the 2005 Dietary Guidelines for Americans and MyPyramid, Food Guidance System. Prior to this, Dr. Hentges served in key positions at the National Pork Board, the National Pork Producers Council, and the National Live Stock and Meat Board.

Dr. Hentges holds degrees from Iowa State University, Auburn University and Oklahoma State University. He is a member of the American Society for Nutrition and the Institute of Food Technologists.

Mr. Wayne Johnston, MLIS
Head, Research Enterprise and Scholarly Communication, University of Guelph Library

Wayne Johnston has been the head of Research Enterprise and Scholarly Communication at the University of Guelph Library since 2009. In that role he leads a team dedicated to supporting and promoting research at the university. Working closely with the Food Institute, he has overseen development of the Food Map, a web-accessible catalogue of food-related research.

Jennifer Adolphe

Senior Nutritionist
Petcurean Pet Nutrition

Harvey Anderson

Professor
University of Toronto

Stephanie Atkinson

Professor
McMaster University

Harold Aukema

Professor
University of Manitoba

Alfred Aziz

Chief, Nutrition Regulations and Standards
Division
Health Canada

Roxi Beck

Director
Centre for Food Integrity

Robert Bertolo

Professor
Memorial University of Newfoundland

Mary Ann Binnie

Nutrition Manager
Canadian Pork Council

Michaela Bohunicky

Student
University of Manitoba

Tristan Brisbois

Principal Scientist, Nutrition Science
PepsiCo Canada

Mark Dekker

Senior Scientist
Mead Johnson Nutrition

Jessay Gopuran Devassy

Student
University of Manitoba

Chiara DiAngelo

Manager, Nutrition Communications
Canadian Sugar Institute

Dennis Dimick

Executive Environmental Editor
National Geographic Magazine

Youjia Du

Student
University of Manitoba

Anne Dumas

Senior Manager, Nutrition Science,
Regulatory Affairs and Quality Assurance
Abbott Nutrition

Alison Duncan

Professor
University of Guelph

Shaunda Durance-Tod

CanolaInfo Manager
Canola Council of Canada

Peter Eck

Professor
University of Manitoba

Corinne Eisenbraun

Director, Professional Practice Development
Dietitians of Canada

Workshop Attendees
(As of May 25, 2015)

APPENDIX B

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Hilary Tulk

Nutrition Science Manager
Nestlé Nutrition

Pat Vanderkooy

Public Affairs Manager
Dietitians of Canada

**Breakout Session
Table Assignments**

APPENDIX C

Table 1 - Question 1 Facilitator: Alfred Aziz Rob Bertolo Tristin Brisbois Heather Keller	Table 2 - Question 2 Facilitator: David Ma Roxi Beck Mark Dekker Katherine Gray
Table 3 - Question 3 Facilitator: Fiona Wallace Corrine Eisenbraun Leah Gramlich Eric Hentges Mary-Jo Makarchuk Ashleigh Wiggins	Table 4 - Question 4 Facilitator: Maria Fernanda-Nunez Harvey Anderson Harold Aumen Marie-Claire Barbeau Alison Duncan Hilary Tulk