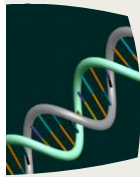




► HOT TOPICS:
THIS MONTH WE ARE FEATURING A BOOK
REVIEW ON MICHAEL MOSS'S SUGAR SALT
FAT: HOW THE FOOD GIANTS HOOKED US



► LET'S TALK SCIENCE SANDY LAKE!
SCIENCE CAMP 2013



► CHECK OUT DNS
ACCOMPLISHMENTS

● DEPARTMENT OF NUTRITIONAL SCIENCES

● UNIVERSITY OF TORONTO

Nutri news

Nutri-News is issued periodically and features the latest news in the Department of Nutritional Sciences. For more information please contact our Editors at shirin.panahi@utoronto.ca.

Fall 2013 EDITION

DAVID JENKINS CHOSEN TO GIVE W.O. ATWATER LECTURESHIP AT EB 2013

On Saturday, April 20, 2013 Professor David Jenkins was chosen to give the W.O. Atwater Lectureship by the USDA's Agricultural Research Service at the Experimental Biology Conference in Boston, Massachusetts.

The Lectureship was established in 1968 to honour the memory of Wilbur Olin Atwater and to recognize scientists who have made significant contributions to improving nutrition around the world.

Congratulations Dr. Jenkins!



Photo: Dr. Jenkins and the L'Abbe lab

Achievements

SELECTED PUBLICATIONS

Chen CT, Domenichiello AF, Trepanier MO, Liu Z, Masoodi M, Bazinet RP. 2013. The low levels of eicosapentaenoic acid in rat brain phospholipids are maintained via multiple redundant mechanisms. *J Lipid Res.* 54(9):2410-22.

Cho CE, Sanchez-Hernandez D, Reza-Lopez SA, Huot PS, Kim YI, Anderson GH. 2013. High folate gestational and post-weaning diets alter hypothalamic feeding pathways by DNA methylation in Wistar rat offspring. *Epigenetics.* 8(7):710-9.

Fernandes J, Wang A, Su W, Rozenbloom SR, Taibi A, Comelli EM, Wolever TMS. Age, dietary fiber, breath methane and fecal short chain fatty acids are interrelated in Archaea-positive humans. *J Nutr* 2013;143:1269-75.

Gabrielson D, Scaffidi D, Leung E, Stoyanoff L, Robinson J, Nisenbaum R, Brezden-Masley, Darling PB. Use of an abridged scored Patient-Generated Subjective Global Assessment (abPG- SGA) as a nutritional screening tool for cancer patients in an outpatient setting. *Nutrition in Cancer* 2013;65(2):234-239.

Mason JK, Fu MH, Chen J, Yu Z, Thompson LU. 2013. Dietary flaxseed-trastuzumab interactive effects on the growth of HER2-overexpressing human breast tumors (BT-474). *Nutr Cancer.* 65(3):451-9.

Kwong MG, Wolever TM, Brummer Y, Tosh SM. 2013 Increasing the viscosity of oat β -glucan beverages by reducing solution volume does not reduce glycaemic responses. *Br J Nutr.* [Epub ahead of print]

Jayalath VH, de Souza RJ, Sievenpiper JL, Ha V, Chiavaroli L, Mirrahimi A, Di Buono M, Bernstein AM, Leiter LA, Kris-Etherton PM, Vuksan V, Beyene J, Kendall CW, Jenkins DJ. 2013. Effect of dietary pulses on blood pressure: A systematic review and meta-analysis of controlled feeding trials. *Am J Hypertens.* [Epub ahead of print]

Nunez MF, Mollard RC, Luhovyy BL, Wong EL, Anderson GH. 2013. Acute sodium ingestion has no effect on short-term food and water intake, subjective appetite, thirst, or glycemic response in healthy young men. *Appl Physiol Nutr Metab,* 38(7):746-52.

Scourboutakos MJ, Samnani-Azad Z, L'Abbe MR. 2013. Restaurant meals: almost a full day's worth of calories, fats, and sodium. *JAMA Intern Med.* 173(14):1373-4.

IN THE MEDIA

Dr. Pauline Darling received media coverage by St Michael's Hospital and Daily Rx News on "Cancer related malnutrition pinpointed with abbreviated form of standard test". Please visit the website below for details:

<http://www.dailyrx.com/cancer-related-malnutrition-pinpointed-abbreviated-form-standard-test>

POSTER PRESENTATIONS

Experimental Biology 2013: Ahmed Aldughpassi, Livia Augustin, Joanna Baxter, Yen-Ming Chan, Clara Cho, Brenda Hartman, Sascha Hunschede, Joseph Jamnik, Cyril Kendall, Sung-Eun Kim, Julie Mason, Arash Mirrahimi, Daiva Nielsen, Matthew Parrott, Lesley Plumptre, Mary Scourboutakos, Yaseer Shakur, Ouxi Tian, Ashleigh Wiggins

ORAL PRESENTATIONS

Experimental Biology 2013: JoAnne Arcand, Chuck Chen, Elena Comelli, Russell de Souza, Dalia El Khoury, Teri Emrich, Bibiana Garcia-Bailo, Joseph Jamnik, Jovana Kaludjerovic, Cyril Kendall, Sung-Eun Kim, Sylvia Ley, Shannon Masih, Alyssa Schermel, Mary Scourboutakos, Sohana Shafique, Ouxi Tian, Christina Wong

Achievements

AWARDS

University of Toronto's 2013 Inventors of the Year

Professor **Ahmed El-Sohehy** has been named one of U of T's Inventors of the Year. Dr. El-Sohehy has invented a panel of seven genetic markers that can be used to determine a person's response to key components of diet: vitamin C, folate, whole grains, omega-3 fat, saturated fat, sodium and caffeine, leading to personalized DNA-based dietary recommendations.

Canadian Nutrition Society (CNS) Leadership Award

Professor **Pauline Darling** was the recipient of the CNS Volunteer Leadership Award at the Canadian Nutrition Society Conference this past June 2013.



The Gordon F. Mutch Young Investigator Award in Diabetes Research

Shirin Panahi (Anderson lab) was the recipient of the Gordon F. Mutch Young Investigator Award given in recognition of best abstract for research on role of lifestyle on the prevention or treatment of type 2 diabetes at the Canadian Nutrition Society Conference this past June 2013.



The George Beaton Award

Teri Emrich (L'Abbe lab) was the recipient of the George Beaton Award given in recognition of the best abstract in public health nutrition at the Canadian Nutrition Society Conference this past June 2013.

Experimental Biology 2013

Mary Scourboutakos (L'Abbe lab) was a finalist and **Ouxi Tian** (El-Sohehy lab) was one of the grand prize winners in the Nutritional Sciences Council's Graduate Student Research Award at Experimental Biology 2013.

Postdoctoral Fellowship

Barkha Patel (Anderson lab) is the recipient of the 2013 CIHR Postdoctoral Fellowship.

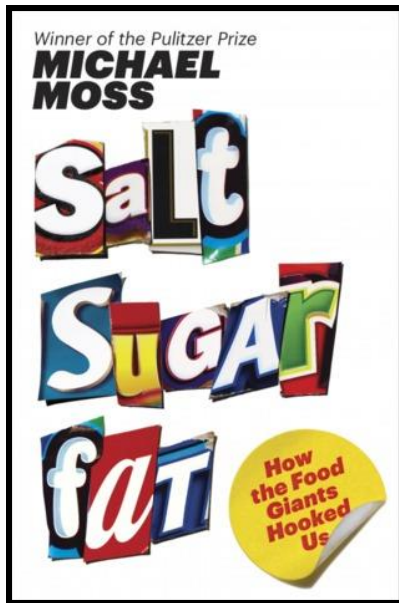
Kidney Foundation Allied Health Scholarship

Arti Sharma Parpia (Darling lab) was recently awarded a Kidney Foundation Allied Health Scholarship. Her project title is "Phosphorus and Potassium Content of Low Sodium Meat, Poultry and Fish Products: Implications for Patients with Chronic Kidney Disease" (funded by the Canadian Foundation for Dietetic Research).

Book Review

Salt Sugar Fat: How the Food Giants Hooked Us by Michael Moss

Review written by Mary Scourboutakos



I have to admit - I first heard about Michael Moss' book last March, when someone (knowing I'm a PhD student in nutrition), started quizzing me about it, only days after it was published. Understandably, my initial reaction to this book was pure annoyance. Frankly, I was not impressed that yet, another journalist had set out to re-state the obvious. Nevertheless, to avoid future embarrassment when quizzed about "nutritional pop culture", I requested the book from the library, considering it "required reading".

Upon reading it, within the first few pages, I knew that my initial impressions had been wrong, my prejudgments, unjustified and my assumptions, negated. This was not just another nutrition book.

In the book, Moss weaves historical anecdotes with key interviews to produce an account of the rise of processed food over the past century. He tells the story of how Philip Morris bought General Foods and Kraft.

He labels the potato chip as the epitome of processed food (because it combines salt, fat, and sugar [in the form of starch]) and he exposes the industry's tactics, such as Frito Lay's attempts to get experts to take pot shots at the evidence linking salt and blood pressure in the 1970s.

By far, my favourite part is the historical anecdotes. Moss describes the story of Dr. Kellogg, the creator of "Kellogg's Corn Flakes" whose intent was to create a healthy cereal for the patients at his sanitarium. Apparently, when he went away to a conference, his brother, and business partner, started adding sugar to the recipe. He then gives an account of Ira Shannon, the dentist, who, in the days before the Nutrition Facts Table (approximately 1975), bought all of the cereals at the grocery store and proceeded to measure and report on the sugar content. Moss explains how Oscar Meyer was the first company to place their names on the package as a sign of excellence, because prior to labeling requirements, most meat manufacturers wished to remain anonymous. Finally, I love that he exposes the irony that exists in the industry where food scientists admit that they are not creating products for their own educated and wealthy demographic. For example, Howard Moskowitz, the man who invented the "bliss point" and saved Dr. Pepper, said he personally does not drink soda.

I have read a lot of nutrition books, but never have I seen one quite like this before. It is a must read for anyone interested in the future of food and the public health challenges that accompany the nutritional landscape created by the industry. This book is available in the U of T library system!

NSGSA Updates

Summer Potluck

Article and photos by Lauren Lin

Friday, July 12th, 2013 turned out to be a great day for the DNS Centre Island potluck – sunny, with just enough of a breeze to disperse the fluffy tufts of summer snow. After claiming their grassy spot adjacent to the beach and foraging for newspaper, the picnickers started up the charcoal grills. You can count on Nutritional Sciences grad students and staff to throw together a fantastic potluck. The basic NSGSA chicken hot dogs/veggie dogs were joined by miso tofu-eggplant-sweet potato-mushroom skewers, baguettes with prosciutto, mortadella and salami, guacamole and chips, samosas, spring rolls, homemade 2-bite brownies, sausages, fresh fruit, and popsicles to name a few. Some even circled up around the grill to roast a couple marshmallows near the end. Through tossing a football/frisbee, chilling by the waves, socializing with new/old friends, and even swimming in the chilly Lake Ontario, it was a Friday well-spent on unwinding and having fun in good company.



"Let's go Blue Jays!"

by Lauren Lin



In the open-roofed Rogers Centre on August 15th, 2013, DNS students joined countless fans in cheering the Toronto Blue Jays to victory against the Boston Red Sox. It was a long game, but the Jays came out on top with a 2-1 win. With high-fives, applause, cans of beer and fist-pumps, the evening ended with everyone in good spirits. A big thank you to Sabrina Janes and Rachael Pettapiece-Phillips for organizing the outing and for finding discounted tickets!

DNS Buddies – Helping new students succeed in graduate school

by Kathryn Hopperton

In winter 2013, DNS graduate students were surveyed on proposals to decrease time to degree completion. One of the more popular proposals that came out of this survey was the creation of a mentorship program, in which first year graduate students would be partnered with senior students in similar fields. In response, the NSGSA, led by mentorship representative Sudaba Mansuri, created the DNS Buddies program. The program debuted in September 2013 with 6 mentor-mentee pairs. Its goal is to facilitate the integration of new students into the DNS and encourage their success in graduate school. The group will meet after seminar on the third Thursday of every month to discuss issues affecting first year graduate students, such as study design, preparing seminar presentations, graduate courses, and applying for funding. We are hopeful that this program will prove useful to mentors and mentees alike! If you are interested in participating in the DNS Buddies program or learning more about us, please contact Sudaba at s.mansuri@mail.utoronto.ca.

NSGSA Updates

Welcome Night for New Students

by Kathryn Hopperton



On September 12th 2013, the Nutritional Sciences Graduate Student Association hosted a pub night to welcome new graduate students to the Department. The evening began with Getting to Know You BINGO, after which the students split into teams for a hotly contested round of Nutritional Science Trivia. It was a great night of meeting new people, food and drink and collegial arguing! We would like to thank the NSGSA social rep, Ingrid Santaren, for organizing this event and to Lauren Lin for photos of the event.

Sample DNS Trivia

1. Which of the following contains the greatest number of Canada's Food Guide Servings?
 - a) Romaine lettuce that occupies approximately the volume of your fist
 - b) A piece of cheese the size of two of your thumbs
 - c) Enough peanuts to cover the palm of your hand
 - d) 30 g of Cheerios
2. According to Pubmed, how many publications does Dr. Jenkins have (1 point if guess within 10, 2 points if guess within 5)
3. If you had graduated from our department prior to 1970, what would your degree have been in?
4. What is a drupe?
5. The mnemonic "**The Whole Food Ladder Must Have Various Key Ingredients**" is used to remember the names of what nutrients? (*Bonus 2 points if you can name them all in the order of the mnemonic!*)

letter codes: Threonine (T), Tryptophan (W), Phenylalanine (F), Leucine (L), Methionine (M), Histidine (H), Valine (V), Isoleucine (I), Valine (K), Isoleucine (I)

Answers: 1) B, 2) 441, 3) Household Sciences, 4) A fruit with a pit, 5) Essential amino acids by single

News & Events

Let's Talk Science Sandy Lake! Science Camp 2013

By Adam McKillop



The LTS SL! 2013 Field Team.

From left to right: Oscar Aguilar, Peter Chen, Shannan Grant, Zoryana Salo, Elsa Dinsdale. Missing from photo: Cailin Clarke. Photo credit: Pedro Huot



Shannan Grant, RD, PhD Candidate in the Department of Nutritional Sciences and LTS SL! Program Coordinator reviews the Aboriginal Food Guide with a camper during "Nutrition Day".

Third year is a charm! University of Toronto Let's Talk Science Outreach volunteers arrived in Sandy Lake, Ontario on August 16th, excited to bring another weeklong camp of hands-on science activities for Sandy Lake children and youth. This year, Sandy Lake welcomed five Let's Talk Science Sandy Lake (LTS SL!) volunteers: Shannan Grant, Peter Chen, Oscar Aguilar, Elsa Dinsdale, and Zoryana Salo. A new addition to the LTS SL! field team was Cailin Clarke from Let's Talk Science National Office.

The LTS SL! Science Camp completed its third successful summer camp, welcoming 60 to 94 children and youth aged 4 to 17 years old each day. The curriculum married various scientific disciplines with Indigenous Knowledge and education principals traditionally used under the Sandy Lake Health and Diabetes Project. The scientific disciplines in the 2013 curriculum included: Nutritional Science and Applied Human Nutrition, Physiology and Anatomy, Exercise Science, Information Technology, Neurology and Applied Psychology, and Botany. The camp curriculum also pulled from the volunteers' education and work experience in community program planning, implementation and evaluation. Combining Let's Talk Science's education platform and Sandy Lake Health and Diabetes Project's years of experience in education delivery in the community, this camp provided the campers an opportunity to learn about science through hands-on activities, peer teaching and storytelling.

New this year, the team of volunteers organized the first ever Let's Talk Science Sandy Lake! Science Camp fundraiser in Toronto. This event brought together a host of local artists and local businesses to celebrate the accomplishments of this project to date and learn about Sandy Lake and the Sandy Lake Health and Diabetes Project. Thanks to the generous donations and support, this year's camp was the best yet!

Planning has already started for the 2014 LTSSL! Science Camp. For more information, please contact the project coordinators at: ltssl.2013@gmail.com.



LTS SL! Fundraiser Event Poster.
Graphic design credit: Chuck Chen.

A special thank you to the amazing people who came together to make this camp possible and the continued support from:

- Let's Talk Science National Office
- Let's Talk Science Outreach
- University of Toronto volunteers
- Sandy Lake Health and Diabetes Project (<http://www.sandylakediabetes.com/>)
- Department of Immunology, University of Toronto
- Engineering Outreach Office, University of Toronto
- All of the generous donors at the LTS SL! Aboriginal Outreach Fundraiser Event
- Glycemic Index Laboratories
- Nutritional Science Graduate Student Association
- Prof. Aimy Bazylak, University of Toronto
- Dr. Richard Bazinet, University of Toronto
- Faculty of Kinesiology and Physical Education, University of Toronto

News & Events



Volunteering with Let's Talk Science Outreach University of Toronto, St. George

Turn kids into Scientists. Become a Let's Talk Science volunteer!

What is Let's Talk Science? Let's Talk Science is a national science outreach program that strives to improve science literacy in the community through innovative, interactive and hands-on educational programs. We motivate and empower youth (Kindergarten through Grade 12) to use science, technology, engineering and mathematics to develop critical skills, knowledge and attitudes needed to thrive in our world.

Why become a volunteer? As a Let's Talk Science volunteer, you have the opportunity to develop your communication, teaching and leadership skills while having fun sharing your excitement for science with youth! You have the flexibility to sign up for events that fit around your schedule, and you might even inspire a future nutritionist! Let's Talk Science (St. George) has also partnered with the *Graduate Professional Skills (GPS) Program* from the School of Graduate Studies at the University of Toronto. This means that Let's Talk Science Graduate volunteers are able to *earn up to 3 GPS credits* for their involvement. Learn more here: <http://www.sgs.utoronto.ca/currentstudents/Pages/Professional-Development.aspx>

What do our volunteers do? Throughout the year, our volunteers partake in a variety of outreach activities, including *Physiology Day*, *StemCellTalks Symposium*, the *All Science Challenge*, and a large variety of classroom visits to deliver "hands-on/minds-on" science workshops.

Want to become a Let's Talk Science volunteer? If you are a Graduate student, Post Doctoral Fellow, or Faculty that is interested in getting involved with the Let's Talk Science at the University of Toronto (St. George), simply visit us at <https://lts.escalator.utoronto.ca/home/how-to-volunteer/>. Please contact us at lts.grad@utoronto.ca if you have any questions or comments.

The Household Science & Nutritional Sciences Alumni Association
University of Toronto
Presents

The Professor Edna W. Park Lecture for 2013

Growth Standards: a new paradigm's early lessons

Cutberto Garza, MD, PhD
Provost and Dean of Faculties
Boston College
Massachusetts, USA

Health Sciences Building, Rm. 610
155 College Street, University of Toronto
5:00 p.m., October 31, 2013

Reception to follow

The Professor Edna W. Park Lecture

The Professor Edna W. Park Lecture was established in the Spring of 1974 by the Household Science Alumni to honour one of its outstanding members, Professor Edna W. Park, for her notable contribution to the field of Home Economics in Canada. Edna Park was a Professor Emerita of the University of Toronto whose teaching career spanned almost half a century.



UNIVERSITY OF TORONTO
FACULTY OF MEDICINE

PHD COMICS adapted from phdcomics.com

Due to the U.S. Government Shutdown,
this comic is currently unavailable.

(Comics have nothing to do with politics, but
neither should Science or Research!)



www.phdcomics.com



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