

Gastrointestinal Clinical Nutrition Fellowship at McMaster University

A one-year fellowship in Gastrointestinal Clinical Nutrition is offered, starting in July 2024. Eligible candidates must have completed their core training in adult gastroenterology (FRCPC or equivalent) and must be eligible for medical licensure in the Province of Ontario. The fellowship is ideally suited for those wishing to practice gastroenterology in an academic setting and with a specific interest in nutritional disorders and nutrition management in gastroenterology.

Background:

The optimization of nutrition for patients with digestive diseases is critical across a range of conditions that include celiac disease, carbohydrate intolerance, short bowel syndrome, intestinal failure, inflammatory bowel disease, pancreatic insufficiency, motility disorders (chronic idiopathic pseudo-obstruction), dysphagia and functional disorders such as irritable bowel syndrome, functional dyspepsia and constipation. Furthermore, nutrition management is important, not just for ambulatory care patients but, also, for hospital in-patients with bowel obstruction, dysphagia, short bowel syndrome and malnutrition.

The gastroenterology nutrition service at Hamilton Health Sciences includes a specialty adult celiac disease clinic (recognized by Society for the Study of Celiac Disease), a regional home parenteral nutrition program, an intestinal failure clinic and an IBD-nutrition clinic; the McMaster Medical Centre site is home to facilities for breath testing (SIBO, carbohydrate intolerance) and indirect calorimetry. In addition, there is an in-patient nutrition consultation service with weekly rounds at the Juravinski Hospital and the Hamilton General Hospital. The GI Clinical Nutrition service is supported by the Farncombe Institute Nutrition Initiative (FINI) and works closely with the Farncombe Family Digestive Health Research Institute for translational research.

Faculty:

Dr. David Armstrong MB BChir, FRCPC (Director: GI Clinical Nutrition Fellowship).



Dr. Ines Pinto-Sanchez MD, MSc, CNSC



Expectations:

Fellows will be expected to work in the clinics of physicians who have a specific interest in nutrition disorders and to become competent in the diagnosis and management of these conditions, including the nutritional management of celiac disease, intestinal failure, inflammatory bowel disease, dysphagia, cystic fibrosis and malnutrition.

Fellows will, also, be expected to participate in weekly in-patient rounds for the management of patients requiring parenteral or enteral nutrition support and to work in the indirect calorimetry clinic to become competent in the use and evaluation of metabolic cart studies.

Fellows will be expected to participate in one or more research projects during the year. Projects range from clinical studies evaluating nutritional deficiencies and quality of life in conditions such as celiac disease, gluten sensitivity and inflammatory bowel disease or in the management of intestinal failure. Research conducted in the Farncombe Family Digestive Health Research Institute is translational in nature and focuses on the role of diet as well as the intestinal microbiota in determining GI nutritional status and GI function in health and disease and involves preclinical and clinical research.

Fellows will be expected to attend the weekly academic half-day offered by the academic division of gastroenterology at McMaster as well as the weekly seminar series offered by the Farncombe Family Digestive Health Research Institute. Fellows will be encouraged and supported to write nutritional board exams through ASPEN to become a Certified Nutrition Support Clinician (CNSC).

Examples of publications:

- Daoud DC, Schwenger KJP, Jung H, Lou W, Armstrong D, Raman M, McHattie JD, Duerksen DR et al. Adult Patients with Short Bowel Syndrome Treated with Teduglutide: A Descriptive Cohort Study. *JPEN J Parenter Enteral Nutr* 2023 On-line.
- Abdi F, Zuberi S, Blom J-J, Armstrong D, Pinto-Sanchez MI. Nutritional considerations in celiac disease and non-celiac gluten / wheat sensitivity. *Nutrients* 2023;15(6):1475.
- Jivraj A, Hutchinson JM, Ching E, Marwaha A, Verdu EF, Armstrong D, Pinto-Sanchez MI. Micronutrient deficiencies are frequent in adult patients with and without celiac disease on a gluten-free diet, regardless of duration and adherence to diet. *Nutrition* 2022;103;111809.
- Mrkobrada M, Chakroborty A, Armstrong D, Handsor S, Patel A, Rahman A. NutriSup-PPN: A Pilot Randomized Control Trial of Oral Nutritional Supplementation (ONS) and Peripheral Parenteral Nutrition (PPN) in Canadian, Malnourished, Hospitalized Patients. *Clinical Nutrition ESPEN* 2023;53:107-112.
- Russell LA, Balart MT, Serrano P, Armstrong D, Pinto-Sanchez MI. The complexities of approaching nutrition in inflammatory bowel disease: current recommendations and future directions. *Nutrition Reviews* 2022;80(2):215-229. <https://doi.org/10.1093/nutrit/nuab015>
- Daoud DC, Cartagena EMS, Schwenger KJP, Somlaw N, Gramlich L, Whittaker S, Armstrong D et al. Home parenteral nutrition in older vs younger patients: Clinical characteristics and outcomes. *J Parenter Ent Nutr* 2022;46(2):348-356. <https://doi.org/10.1002/jpen.2117>
- Pinto-Sanchez MI, Nardelli A, Borojevic R, De Palma G, Causada Calo N et al. Gluten-Free Diet Reduces Symptoms, Particularly Diarrhea, in Patients With Irritable Bowel Syndrome and Antigliadin IgG. *Clin Gastroenterol Hepatol* 2021;19(11):2343-2352. <https://doi.org/10.1016/j.cgh.2020.08.040>
- Noelting J, Gramlich L, Whittaker S, Armstrong D, Marliss E, Jurewitsch B et al. Survival of Patients With Short-Bowel Syndrome on Home Parenteral Nutrition: A Prospective Cohort Study. *J Parenter Ent Nutr* 2021;45(5):1083-1088. <https://doi.org/10.1002/jpen.1984>
- Tran V, Bielawska B, Jeejeebhoy KN, Gramlich LM, Raman M, Whittaker S, Armstrong D, Marliss EB, Allard JP. Variations in practice patterns for adult cancer patients on home parenteral nutrition in Canada, *Nutrition* 2019; 65: 27-32. <https://doi.org/10.1016/j.nut.2019.01.021>

- Pinto-Sanchez MI, Gadowsky S, McKenzie S, Raphael MJ, Childs A, Thabane M, Hansen S, Marshall JK, Armstrong D. Anxiety, Depression and Quality of Life Improve After 1 and 3 Months of HPN: A Pilot Study in a Canadian Population. *J Can Assoc Gastroenterol* 2019; 2:178–185, <https://doi.org/10.1093/jcag/gwy045>
- Pinto-Sánchez MI, Causada-Calo N, Bercik P, Ford AC, Murray JA, Armstrong D, Semrad C, Kupfer SS et al. Safety of Adding Oats to a Gluten-Free Diet for Patients With Celiac Disease: Systematic Review and Meta-analysis of Clinical and Observational Studies. *Gastroenterology* 2017; 153: 395-409.e3. <https://doi.org/10.1053/j.gastro.2017.04.009>
- Hortencio TDR, Arendt BM, Teterina A, Jeejeebhoy KN, Gramlich LM, Whittaker JS, Armstrong D et al. Changes in Home Parenteral Nutrition Practice Based on the Canadian Home Parenteral Nutrition Patient Registry. *J Parenter Ent Nutr* 2017;41: 830-836. <https://doi.org/10.1177/0148607115609289>

Funding:

Limited internal funding is available, but candidates are encouraged to apply for external funding or to provide their own funding from their parent institutions.

Applications:

Applications will be accepted until November 30th, 2023.

Please submit your application to the Post-Graduate Medical Education (PGME) office via the following link:

<https://pgme.mcmaster.ca/apply/fellowships-application/>.

Application requirements, deadlines, and the application portal are all available on this website

Further Information:

<https://medicine.healthsci.mcmaster.ca/divisions/gastroenterology/gastroenterology-education/gastroenterology-nutrition-fellowship/>

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