



Takeda Intestinal Failure / Surgical Nutrition Fellowship **Jackson Memorial Hospital / University of Miami**

The University of Miami / Jackson Memorial Hospital Surgical Nutrition team, a surgeon-led multidisciplinary team which includes a clinical pharmacist, registered dietitian, and resident trainee, provides inpatient medical and surgical care for patients with complex gastrointestinal anatomy and inpatient consultation for enteral and parenteral nutrition (PN) support, as well as outpatient management of PN, intravenous fluids, and enteral nutrition (EN). The Surgical Nutrition team specializes in intestinal rehabilitation of short bowel syndrome, treatment of bariatric surgery complications, surgical repair of enterocutaneous/enteroatmospheric fistulae, and advanced practice daily customized PN therapy. The median daily inpatient census is 15 patients (range 11-21), median monthly consultations are 20 (range 14-32), median monthly operative case volume is 8 (range 2-17), and median monthly clinic census is 42 (range 15-99) exclusive of telemedicine clinic visits, which are increasing in volume.

Due to our case mix, surgical critical care is an integral part of many of our patients and consults and the team is led by two critical care board-certified surgeons with expertise in managing critically ill surgical and trauma patients. The service receives consultations from the southeast United States as well as the Caribbean and follows patients who live at a distance using telemedicine technology. Dr. Byers and Dr. Yeh are both certified by the American Board of Surgery with added Qualifications in Critical Care, as well as the National Board of Nutritional Support, and Dr. Yeh is a fellow of critical care medicine (FCCM) and a fellow of the American Society for Parenteral and Enteral Nutrition (FASPEN).

Physicians who have completed **at least two years of general surgery residency training** are eligible to apply for the Intestinal Failure Fellowship. The Fellowship accepts one candidate each year.

Goals and Learning Objectives: At the conclusion of this fellowship, participants will be able to...

- Perform a comprehensive nutritional assessment of a malnourished and catabolic patients on the ward and in the intensive care unit and prescribe a customized enteral or parenteral nutritional plan
- Prescribe a detailed step-up approach for nutrition support and intestinal rehabilitation for patients with intestinal failure along the continuum of care from critical illness to stabilization to discharge and in the home setting. This may include medications, "nutraceuticals" (nutritional pharmaceuticals), specialized diets, enteral nutrition (EN), and parenteral nutrition (PN).
- Follow patients in the home setting and prescribe customized parenteral and enteral nutrition prescriptions based on their nutritional and metabolic needs and their intestinal function.
- Perform comprehensive evaluations of patients with enterocutaneous fistulae including bowel mapping approaches and techniques, nutritional support and enteral access approaches, and preoperative evaluation.

- Perform vascular, advanced enteral and peritoneal access and competently manage common post-operative complications.
- Perform a comprehensive pre-operative workup for a patient awaiting intestinal/multivisceral transplant and competently manage common post-operative complications.
- Develop operative expertise in complex abdominal operations that include repair of entero-cutaneous fistulae, restoration of intestinal continuity, and excision of mesh and abdominal wall reconstruction.

Duties and Responsibilities

1. Become integrated into the Surgical Nutrition team and attend daily inpatient rounds on the Surgical Nutrition service admitted and consulted patients at Jackson Memorial Hospital/Ryder Trauma Center. Entrustment of roles and responsibilities of the Fellow will be granted on an individualized graded autonomy basis.
2. Fellows will assist in the operating room for all surgical nutrition cases at their level, such as enteral access (endoscopic, laparoscopic, or open gastrostomy/jejunostomy), fistulogram, and enterocutaneous fistula repair, peritoneal dialysis catheters, with abdominal wall reconstruction, etc.
3. The Surgical Nutrition team has 2 half-days of clinic each week and the Fellow will be assigned to assist the faculty in these clinics. The clinical mentors will provide opportunity for the Fellow to evaluate new consultations for malnutrition and to actively manage patients with intestinal failure and insufficiency in the home setting.
4. The fellow will be exposed to the Intestinal Transplant Service and the intestinal and multi-visceral transplant patients. The fellow will be exposed to patients in the pre-transplant, intraoperative, peri-transplant and post-transplant period and have an opportunity to learn about short -and long-term complications of intestinal transplant including acute cellular rejection, antibody mediated rejection, graft versus host disease and post-transplant lymphoproliferative disease.

Additional Collaborations

The Surgical Nutrition team has a collaborative relationship with Dr. Jennifer Garcia, Medical Director of the Pediatric Liver and Intestinal Transplant service of the Miami Transplant Institute (MTI). The Intestinal/Multivisceral Transplant (ITx/MVTx) service of the MTI specializes in patients with Intestinal failure who have failed Intestinal rehabilitation. Since its inception in 1994, the service has performed nearly 500 transplants, making it the 3rd largest program in the world in the history of the procedure. The mean daily inpatient service is 10 patients, monthly clinic census ranges from 32-48, and 1-2 new transplants are performed per month. As part of the learning experience, the Fellow will attend Dr. Garcia's Center for Intestinal Rehabilitation outpatient clinic (**1st and 3rd Monday mornings of the month**) at least twice per month and will participate in the inpatient pre-operative and post-operative care of intestinal transplantation recipients.

Additionally, the Surgical Nutrition team has a close collaborative relationship with Dr. Maria Abreu, Director of the University of Miami Crohn's & Colitis Center, which offers multidisciplinary care for patients with inflammatory bowel disease (IBD). We are a tertiary referral center for patients with IBD from Florida and internationally. We perform investigator-initiated studies on a variety of areas and have a particular interest in nutrition. We also perform many pharmaceutical clinical trials in the hopes of offering patients cutting edge therapies. As part of the learning experience, the Fellow will attend the Crohn's & Colitis Center outpatient clinic (**half-day on 2nd and 4th Wednesdays**) at least twice per month.

Education and Research

The one-year didactic curriculum will be derived from the ASPEN Adult Nutrition Support Core Curriculum, 3rd Edition with the expectation that the Fellow will take the Certified Nutrition Support Clinician[®] (CNSC) exam during the spring season test offering. The Fellow will be assigned to prepare a monthly presentation on an Intestinal Failure topic.

The Fellow will be provided membership to the American Society of Parenteral and Enteral Nutrition and will be fully funded to attend the annual Clinical Nutrition Week conference.

The Intestinal Failure Fellow will be assigned to develop and execute a quality improvement project over the course of the year. The clinical faculty have several ongoing clinical research studies and the Fellow will be invited to participate as co-investigator and co-author. Advanced training in research methodology, scientific writing, and clinical trial design will be offered.



Patricia Byers, MD FACS

D. Dante Yeh, MD MHPE FACS FCCM FASPEN CNSC

Carly Duncan, PharmD CNSC

Patricia Machado, ARNP

Lindsey Gass, RD

12-month fellowship training start date: August 01, 2022

Please send curriculum vitae to: dxy154@med.miami.edu