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GUT INSTINCTS: MY PERSPECTIVE

Gastroenterology Fellowship Programs: The Fellows' Perspective

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Gastroenterology fellowship programs vary widely, and every program has its strengths and weaknesses. Some programs are based in community hospitals, whereas others are deeply rooted in academia. Each has a unique blend of outpatient and inpatient care, endoscopy volume, and research time. Despite curricular differences, fellowship programs continue to adequately train future gastroenterologists; there is a mean initial board certification exam pass rate >90% for the last 5 years, which is one of the highest pass rates among internal medicine specialties.¹ Though the vast majority of fellows acquire the necessary knowledge required to be board certified, preparation for a successful and rewarding career after gastroenterology fellowship requires much more.

Training in routine endoscopic procedures (i.e., esophagogastroduodenoscopy (EGD) and colonoscopy) remains a primary focus during gastroenterology training. The current core curriculum guidelines suggest that gastroenterology fellows should perform a minimum of 130 EGDs and 140 colonoscopies before assessing aptitude, though these benchmarks are arbitrary.² Most fellows achieve procedural competence in upper endoscopy rapidly; achieving competence in colonoscopy is more challenging. Recent data suggest that the majority of fellows gain proficiency in colonoscopy between 200-275 procedures.^{3,4} Some fellows require more procedures to demonstrate procedural independence. As health-care management is evolving to include measuring the quality of endoscopy, endoscopic training during fellowship should evolve to include feedback on metrics now commonly adopted in community practices. This approach will familiarize fellows early on with the parameters (i.e., cecal intubation rate and adenoma detection rate) that determine quality endoscopy.5

In contrast to endoscopic training during fellowship, most gastroenterology fellowship programs provide inadequate training in clinical nutrition^{6,7} and motility.^{8,9} Exposure to the principles of nutrition support varies amongst programs, with some programs providing a month or less of structured training. The vast majority of fellows are inadequately trained in the basics of nutrition, including construction of total parenteral nutrition formulas or prescribing enteral nutrition supplementation.⁷ Formal training in gastrointestinal motility

disorders is equally deficient in many current fellowship curricula. Nearly 25% of the US population is afflicted by motility disturbances or functional bowel disorders, and there is a high cost impact of treatment.¹⁰ The majority of resources during training are directed at acquiring endoscopic skills and the inpatient experience managing gastrointestinal bleeding, refractory inflammatory bowel disease, and acute liver failure. Training in treatment of common gastrointestinal disorderssuch as functional bowel disorders, mild-to-moderate inflammatory bowel disease, chronic hepatitis, and fatty liver disease -is relegated to patients seen in fellowship continuity clinics where access to "expert" mentors is limited in most programs. Unfortunately, management of these chronic outpatient diseases requires a different skill set than inpatient care. Given the burden of these diseases in outpatient practice, fellowship training should provide more formalized training in management. This, in combination with the development of entrustable professional activities,¹¹ we hope, will better prepare fellows for clinical practice.

Many, but not all, fellowships offer preparatory didactic sessions regarding transition to practice, academic vs private practice careers, further training (fourth year fellowships), and contract negotiations. Candid discussions with program leadership and trusted mentors early in fellowship can provide insight into the career options and alleviate the anxieties regarding a future career. We believe that such lectures should be a required part of the curriculum during fellowship. Clinical exposure through satellite hospitals and clinics in the surrounding catchment can provide fellows a community practice perspective. When appropriate, training should include exposure to management of insurance reimbursements and practice management.

Specialized rotations away from a home institution can be a vital tool to diversify the fellowship experience. To bridge gaps in training or explore areas of special interest, fellows should seek out the various learning opportunities offered by several major gastroenterology societies. The Crohn's and Colitis Foundation of America, the American College of Gastroenterology, the American Society of Gastrointestinal Endoscopy, the American Neurogastroenterology and Motility Society, and the Nestle Nutrition provide grant funding for selected fellows

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to gain additional experience outside their home institution. In addition to the academic value of such opportunities, fellows are also able to network with premier thought leaders for future job opportunities and academic collaborations.

The length of training of fellowship remains a debated issue among fellows and educators. By completion of fellowship, many fellows will have moved locations up to three times since finishing college, putting stress on family and financial planning. In recent years, some have advocated for reducing the length of general gastroenterology fellowship from 3 to 2 years. This may be a feasible goal. Gastroenterology fellowship in Canada is completed in 2 years, and many third-year fellows are capable of performing endoscopic procedures with near independence and can manage outpatient clinic or hospital consultations with minimal supervision. Minor changes to fellowship curriculum could mean that those interested in a career in general gastroenterology could begin their careers 1 year earlier. However, given the shortage of practitioners in needed "superspecialties" such as hepatology¹² and inflammatory bowel disease,¹³ we advocate that the length of fellowship remain 3 years, but with the option during the third year to focus in an area of interest (such as hepatology, nutrition support, therapeutic endoscopy, inflammatory bowel disease, or clinical research). Many institutions currently train their fellows in endoscopic retrograde cholangiopancreatography (ERCP) and/or endoscopic ultrasound (EUS) during general fellowship. Though this practice allows select fellows the opportunity for credentialing in advanced therapeutic procedures, current societal recommendations advocate for a fourth year of training to gain sufficient expertise in ERCP¹⁴ and EUS,¹⁵ thus most tertiary referral centers seeking therapeutic endoscopists mandate this additional year of training. However, training in therapeutic endoscopy for routine community practice can still occur during the 3-year fellowship. Training is moving guickly in this direction. Several institutions, such as the Virginia Commonwealth University Medical Center, are piloting a program incorporating 2 years of general gastroenterology training with a year of transplant hepatology training to allow fellows to sit for certification exams in both disciplines.¹⁶ Though other superspecialties (i.e., inflammatory bowel disease) do not require additional board certification, programs could be designed in the same manner.

Health-care and medical training in the United States continue to evolve in parallel. Despite the growing number and specificity of Accreditation Council for Graduate Medical Education curricular requirements, we applaud gastroenterology fellowship training programs for continuing to flourish and remaining responsive to meet these changing demands. We believe that the future of gastroenterology is bright, and hope that fellowship training remains a satisfying and enjoyable experience for fellows and attending physicians alike.

CONFLICT OF INTEREST

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