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In this issue





Bariatric and Metabolic Endoscopy – The Future is Now! Roberto Simons-Linares, MD, MSc Christopher C. Thompson, MD, MSc, AGAF, FACG, FASGE, FJGS



At the Frontiers of Bariatric & Metabolic Endoscopy: A Conversation with Dr. Roberto Simons-Linares, Director of Bariatric Endoscopy at the Cleveland Clinic, Cleveland, Ohio, USA and Dr. Christopher Thompson, Director of Endoscopy at Brigham and Women's Hospital, Boston, Massachusetts, USA Vivek Kaul, MD



TTT's Triumphant Return
Kelly W. Burak, MD, FRCPC, MSc (Epid)

WCOG 2022: Looking Forward to Welcoming You to Dubai



Joost PH Drenth, MD, PhDChair, Scientific Programs Committee, WGO
Nijmegen, The Netherlands



The World Gastroenterology Organisation is proud to present the World Congress of Gastroenterology 2022 (WCOG 2022) that will be organized in conjunction with the Emirates Gastroenterology and Hepatology Society in Dubai, 12-14 December 2022. This will be a first-class meeting where East meets West and where science informs care.

Beginning on the 10th, preceding the Scientific Program, we will host a wonderful Postgraduate course focusing on the management of commonly encountered clinical scenarios within clinical gastroenterology. The course will highlight gastroesophageal reflux disease and we are looking forward to hearing Dr. Ronnie Fass, current Editor-in-Chief of the *Journal of Clinical Gastroenterology*, talk on *GERD*, *Reflux Hypersensitivity or Functional Heartburn?* Additional speakers and topics will include Amy Oxentenko talking about the management of non-celiac entheropaties, while Ala Sharara will go into the sometimes-difficult differential diagnosis of IBS and IBD.

On December 11, we will kick of the Endoscopy course which is jampacked with short 15-minute state-of-the-art lectures on crucial items such as *Esophageal Squamous Cell Cancer* (Naohisa Yahagi), *Dealing with Difficult Biliary Strictures* (Nageshwar Reddy), and *Endoscopic Diagnosis of Colorectal Polyps* (Aasma Shaukat). We have built in a leadership development course that will offer young and upcoming GI specialists the chance to connect with seasoned experts in the field. I personally look forward to the presentation on *Building your Brand* by Carolina Olano.

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Editors



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Article Instructions

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Continued from page 1

WCOG's main events will debut on December 12 starting with attractive sunrise sessions discussing crucial topics, such as hepatitis D and women's health in IBD. These exciting sessions are spearheaded by experts in the field and designed to achieve maximal interaction with the participants. Another can't miss event will be a series of pro-con debates on highly contentious topics, where either side of the story can be debated. These sessions are followed by several symposia

that will cover the broad range of gastroenterological issues we deal with inside of our own clinical practices. Speakers will go in depth on pharmacology and liver disease and the latest on the pancreatitis and management of its complications.

Also, we are proud to have devoted a special session to gastroenterology in sub-Saharan Africa. Elly Ogutu will talk on expanding GI capacity in sub-Saharan Africa, which is much needed, and Ganiyat Oyeleke to talk on management of infectious diarrhea in Africa. The cool thing about WCOG 2022 is that we will facilitate inclusive interaction amongst participants who will be able to easily reach out to the experts to expand their network.

WCOG 2022 is just around the corner and, as the excitement builds, we encourage you to come and witness a wonderful conference in Dubai first-hand.





Message from the Editors



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To our WGO Community,

Welcome to our last newsletter of 2022. We begin with a personal invitation to our entire community to join us in Dubai, UAE for the World Congress of Gastroenterology 2022 (WCOG2022) beginning December 10th until the 14th.

In this *e-WGN* edition, Dr. Roberto Simons-Linares and Dr. Christopher Thompson, USA, provide an Expert Point of View article on bariatric and metabolic endoscopy. The World Health Organization has recognized obesity as an epidemic and major public health problem. As such, a wide variety of endoscopic bariatric and metabolic therapies (EBMTs) are now available and state-of-the-art endoscopic approaches are discussed

including intragastric balloon, endoscopic sleeve gastroplasty, aspiration therapy, endoscopic gastric bypass revision with suturing, and sleeve-insleeve procedures. Dr. Vivek Kaul, chair of WGO's Endoscopy, Other Procedures and Outreach Interest Group, also shares an informational conversation with both experts.

Earlier in 2022, in-person workshops for WGO's Train the Trainers (TTT) were held again and Dr. Kelly Burak (Canada), TTT Committee Chair, summarizes work efforts for relaunch including an updated TTT curriculum and new modules, specifically one dedicated entirely to "feedback." The TTT Committee also has a strong commitment to diversity, equity, and inclusion. As an example,

intentional efforts were made to invite equal number of women to participate as faculty in the Warsaw, Poland TTT workshop. Additional alumni testimonials are shared here as well and indeed, TTT has had a triumphant return!

Training Center Spotlights on Nairobi and Addis Ababa are included in this edition, with GI fellows from both centers sharing heartfelt experiences and gratitude for the mentorship.

The 18th World Congress for Esophageal Diseases (ISDE) 2022 was held virtually and Chair and Chief of the Division of Esophageal and Upper Gastrointestinal Surgery, Dr. Simon Law, Hong Kong SAR, China, provides a full summary of the program with more than 50 scientific sessions, nearly 100 speakers, and over 500 oral and poster abstract presentations.

Finally, the WGO Guidelines and Cascades News has an updated endoscopic disinfection guideline which is now published in the *Journal of Clinical Gastroenterology*. These updated guidelines address the recent multi-drug resistant organisms after endoscopy and provide recommendations based on an international multidisciplinary working group.

Hopefully you enjoy reading this *e-WGN* newsletter and wish you good health and prosperity in 2023!

Mahesh and Anita



Bariatric and Metabolic Endoscopy – The Future is Now!



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Figure 1. INTRAGASTRIC BALLOON

Introduction

The World Health Organization (WHO) recognized obesity as an epidemic and major public health problem in 1997. In the United States, the American Medical Association (AMA) acknowledged obesity as a chronic disease in 2013 and a recent study projected that one in two adults will have obesity in the US by 2030. There are multiple available treatments for obesity, including lifestyle modification (diet, exercise, behavioral therapy), anti-obesity medications (AOM), bariatric surgery and bariatric and metabolic endoscopy.

Interestingly, the Look AHEAD trial studied long-term effects of intensive lifestyle intervention and found that no difference in cardiovascular mortality and participants lost –4.7% of initial weight. The prevalence of AOM use is very low. A large study reported AOM was prescribed to only 1.3% of an eligible cohort with obesity.³ In addition, despite improvements in bariatric surgery technique, safety, mortality and outcomes, its overall utilization remains very low at about 1%.^{4,5}

Since we live in the world of personalized medicine, innovation and evolving technologies, patients should have access to all available therapies to help manage obesity. Bariatric and metabolic endoscopy is a safe, minimally invasive and effective treatment option for obesity. It has the potential to increase access for treating obesity, it is cost-effective, potentially repeatable, reversible, and perhaps a more suitable option for a chronic relapsing disease such as obesity.

A wide variety of endoscopic bariatric and metabolic therapies (EBMTs) are available to patients (BMI ≥30) for the treatment of obesity, diabetes and metabolic comorbidities.⁶ Primary EBMTs include:

- 1. Space occupying devices (Intragastric balloons),
- 2. Gastric remodeling via suturing (Endoscopic Sleeve Gastroplasty (ESG)) or plication (Primary Obesity Surgery Endoluminal (POSE)) and the Endomina procedure,
- 3. Aspiration therapy (Aspire Bariatrics, currently off market due to financial issues),

- 4. Duodenal Mucosal Resurfacing (DMR),
- 5. Sleeve or bypass liners, and 6. Endoscopic anastomosis.

Secondary EBMTs, or so-called endoscopic revision of prior bariatric surgery, include:

- 1. Endoscopic gastric bypass revision with suturing (Transoral outlet reduction (TORe)) or plication (Restorative Obesity Surgery Endoluminal (ROSE)) procedures, and also
- 2. Endoscopic revision of sleeve gastrectomy (SG) Sleeve-in-Sleeve (SIS), via suturing or plication techniques.

PRIMARY EBMTs

Intragastric Balloon (IGB): Modern IGBs have been performed as outpatient procedures since 1997 and are safe and effective treatments for obesity and metabolic comorbidities. Their mechanisms of action are related to increased satiation and satiety from their space occupying features and prolonged gastric retention (Figure 1). A meta-analysis of 17 studies including 1,638 patients showed an

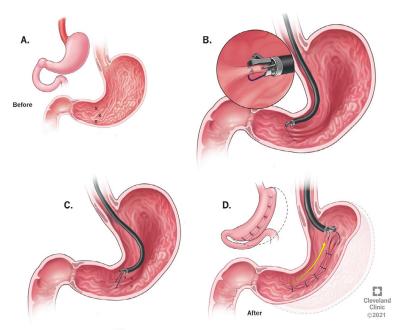


Figure 2A. ENDOSCOPIC SLEEVE GASTROPLASTY (ESG)

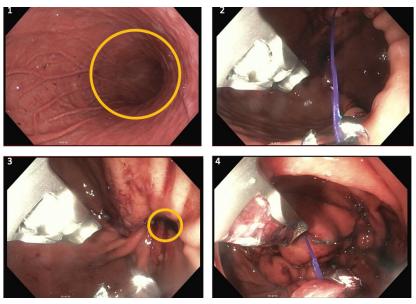


Figure 2B. ENDOSCOPIC SLEEVE GASTROPLASTY (ESG)

excess weight loss (EWL) of 25.4% and total weight loss (TWL) of 11.3% at 12 months.⁸ Another meta-analysis of ten randomized controlled trials (RCT) and 30 observational studies including 5,668 subjects showed IGB can treat obesity-related comorbidities by improving hypertension,

diabetes (fasting glucose and HA1c), hyperlipidemia, waist circumference, and liver function tests. The serious adverse event (SAE) rate was 1.3%.9 IGB also improves liver health. A met analysis of nine studies, including 442 patients found significant improvements of non-alcoholic fatty

liver disease (NAFLD), specifically improvements in steatosis by imaging 79.2% (66.3–88.1), NAS score 83.5% (60.8–94.3), HOMA-IR score 64.5% (53.6–74.1), and CT liver volume 93.9% (81.3–98.2).¹⁰

Endoscopic Sleeve Gastroplasty (ESG): This marks the 10th year anniversary of the first ESG (Thompson and Hawes).11, 12 It is a gastric remodeling procedure (Figure 2) that involves endoscopic full-thickness suturing to reduce the gastric volume by ~70-80% and is potentially associated with a delay in gastric emptying. It is one of the most effective endoscopic treatments for obesity and metabolic comorbidities. The MERIT trial compared ESG with lifestyle modification vs lifestyle modification alone. This study found EWL of 49.2% and a TWL of 13.6% at one year. 80% of participants had improvement of one or more metabolic comorbidities. At 104 weeks, 41 (68%) of 60 participants in the ESG group maintained 25% or more of EWL. The SAE was 2%, no participant developed new GERD and there was no mortality.¹³ A large study of 3,018 patients who underwent ESG were propensity matched and compared to laparoscopic SG patients. The study found that ESG induces noninferior weight loss compared to laparoscopic SG at three years, and with similar comorbidity resolution and safety profiles. The study's mean difference in %TWL was 9.7% (95% CI, 6.9-11.8), 6.0% (95% CI, -2.0 to 9.4), and 4.8% (95% CI, -1.5 to 8.7) at one, two, and three years.14 ESG is also durable - a study of 216 patients showed sustained TWL of 15.9% at five years post-ESG. A metanalysis of eight studies, including 1,772 patients, found sustained weight loss post-ESG by showing TWL of 16.5% (95% CI, 15.2-17.8) at 12 months and 17.2% (95% CI, 14.6-19.7) at 24 months. The pooled post-ESG rate of SAE was

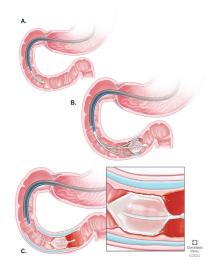


Figure 3. DUODENAL MUCOSAL RESURFACING (DMR)



Figure 4. DUODENAL-JEJUNAL BYPASS LINER (DJBL)

2.2% (95% CI, 1.6%-3.1%).¹⁵ ESG also improves NAFLD/NASH, as shown in a study of 118 patients with obesity and NAFLD that underwent ESG. The study found improvement in HOMA-IR score, decreased from 6.7 to 3.0 (P=.019), hepatic steatosis index score decreased by four points per year (P for trend, <.001), NAFLD fibrosis score decreased by 0.3 point per year (P=0.034). Twenty-four patients (20%) improved their risk of hepatic fibrosis from F3-F4 to F0-F2 (p=0.02).¹⁶

There is also evidence that ESG in combination with glucagon-like

peptide 1 (GLP-1) agonists improve outcomes. A study showed ESG + liraglutide achieve higher TWL (25.07 vs 20.17; p<0.001) at one year post-ESG.¹⁷ Another prospective study found that adding semaglutide to ESG leads to higher weight loss (25% vs. 19%, p<0.01).¹⁸

Duodenal Mucosal Resurfacing (DMR): Endoscopic treatment of diabetes and insulin resistance is just getting started and it has a bright future. This endoscopic therapy is proposed to treat abnormal duodenal mucosa that leads to changes in incretin secretion and insulin resistance.19 DMR involves the hydrothermal ablation of duodenal mucosa to induce healthy epithelia regrowth and improvement of insulin resistance and diabetes (Figure 3). The first in human study performed in Chile, included 44 type II diabetes patients and showed safety, and significant decrease in fasting post-prandial glucose.20 The REVITA-1 study found significant decrease in HbA1c (1.1%; p<0.01), and improvements in HOMA-IR score, weight loss and liver function tests.21 The REVITA-2 was a double blind, randomized multicenter shamcontrolled trial that found significant decrease in HbA1c (-1% ±0.3; p<0.001), as well as HOMA-IR (-1.9 ±0.6; p=0.01)].22 An FDA US pivotal trial is currently underway.

Small Bowel Sleeves and Bypass Liners: There are multiple duodenal-jejunal bypass liner (DJBL) devices (Figure 4), which are endoscopic devices that mimic the small bowel mechanism of a Roux-en-Y gastric bypass (RYGB). A large meta-analysis of 17 studies found HbA1c decreased by 1.3% (95%CI 1.0, 1.6) and HOMA-IR decreased by 4.6 (95%CI 2.9, 6.3). The reported TWL was 18.9% (7.2,30.6), EWL of 36.9% (29.2,44.6), and a BMI reduction of 4.1 kg/m2 (3.4, 4.9).²³ The most commonly used device (Endobarrier,

GI Dynamics, Boston MA) continues to be studied as part of a US pivotal trial in order to get FDA approval. DJBL offers a unique mechanism for weight loss in addition to targeting insulin resistance to improve diabetes.

Endoscopic Anastomosis: The use of magnets, stents and newer devices in development are changing the way we do bowel anastomosis. For obesity this means a new physiologic target for treatment. A survival study in pigs showed that using self-assembling magnets to create large-caliber anastomoses (Incisionless Anastomosis System [IAS]) is feasible, safe and 100% of the anastomosis were patent without leaks, inflammation or fibrosis; and all five pigs survived.24 Another survival study showed that endoscopic jejuno-ileal bypass creation using IAS magnets performed in eight pigs was feasible and durable at three months.²⁵ Endoscopic magnetic anastomosis appears promising for the treatment of obesity as they target small bowel physiology, are feasible and safe. The first in human study of partial jejunal diversion (PJD) using an incisionless magnetic anastomosis system was reported in 2017.26 In this study ten patients underwent the PJD with the incisionless magnetic anastomosis system (IMAS) without any serious adverse events. Moreover, the anastomosis remained widely patent in all patients at one year. Average total weight loss was 14.6% (40.2% excess weight loss at 12 months). A significant reduction in hemoglobin A1c level was observed in all diabetic (1.9%) and prediabetic (1.0%) patients. Endoscopic magnetic anastomosis are safe, effective, but long-term outcomes for weight loss and improvement of metabolic comorbidities in humans remains to be elucidated.

SECONDARY EBMTs

Transoral Outlet Reduction (TORe) (Figure 5): Revisional bariatric surgery has increased risks and lower efficacy

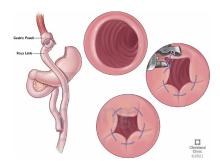


Figure 5A. TRANSORAL OUTLET REDUCTION (TORe)

when compared to the index surgery. In RYGB patients, the size of the gastrojejunal anastomosis (GJA) outlet correlates with weight regain. Endoscopic suturing or plication can be used to decrease the GJA outlet size and treat obesity. For example, a large study of 331 patients showed sustained weight loss and reported 8.8% TWL at five years after the TORe procedure with no SAE.²⁷ A more recent study for weight regain after RYGB compared different treatment strategies: AOM alone (6.8% TWL) vs. TORe alone (8.7% TWL) vs. revisional GJA surgery (16.4% TWL) vs. TORe + AOM (16.2% TWL). The study concluded that TORe + AOM achieved similar TWL% compared to revisional GJA surgery but had fewer SAE (4% vs 18.2%).28 A meta-analysis of 32 studies found that 26 studies reported full-thickness suturing TORe, which had superior outcomes compared to superficial suturing technique (EWL 21.6 ± 9.3% and 16.9 ± 11.1%, at six and 12 months).29 These results are consistent with another meta-analysis of 13 studies including 850 patients that reported 8.55% TWL at one year.30 A study found that TORe has similar long-term outcomes to surgical revision at five years, but lower SAE (6.5% vs 29%). The TWL (11.5% vs 13.1%; p=0.67), and %EWL (15.4%) vs 15.8%; p=0.92) were comparable.³¹ The TORe procedure is an effective and safe treatment for obesity in













Trasoral Outlet Reduction (TORe) procedure (Before and after) A. Dilated gastrojejunal anastomosis (GJA)

outlet (>35 mm diameter). B. Argon plasma coagulation (APC) of the

GJA outlet

C. Endoscopic suturing of the GJA outlet with pursestring technique and TTS balloon to size the diameter of the closure (to 6mm). D. GJA outlet at the end of the TORe

E.GJA outlet 3 months post-TORe

5B. TRANSORAL OUTLET REDUCTION (TORe)

RYGB that have regained weight. Sleeve-in-Sleeve (SIS) Procedure:

Endoscopic revision of SG (SIS procedure) is a safe and efficacious treatment for weight regain after SG. A multicenter study of nine centers including 82 patients showed TWL of 15.7% ±7.6% at one year. It also showed only one adverse event (0.012%), GE junction narrowing that resolved with one endoscopic dilation session.³² Another SIS procedure multicenter study found 18.3% TWL and 51.9% EWL at one year and no SAE.33 This procedure is a

great endoscopic option for weight regain after SG in selected patients.

THE FUTURE IS NOW

Bariatric and metabolic endoscopy is here to stay. Its future is bright, and many patients will continue to benefit from it. As briefly described in this article, there are multiple primary and secondary EBMTs that can be offered to patients with obesity, these therapies continue to prove safe, effective and very appealing as non-surgical, "scarless" options for patients. In addition, as newer technologies continue to

emerge, such as robotics in endoscopy, this could improve EMBT techniques, lead to development of new procedures, and help improve outcomes. This is an excellent opportunity for research, education, collaboration and leadership development for gastroenterologists across the globe.

Conclusion

Obesity is a chronic relapsing multiorgan disease that affects millions of people worldwide, and its prevalence continues to increase. Bariatric and metabolic endoscopy are safe, effective, non-surgical and cost-saving option to treat obesity and metabolic comorbidities. Collaboration across disciplines must continue to increase access to EBMTs for patients and training for health care providers. Finally, a multidisciplinary approach for the treatment of obesity is key, and comprehensive obesity programs that offer all available therapies, including EBMTs are needed to overcome the current obesity pandemic.

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Congratulations to the 2022



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At the Frontiers of Bariatric & Metabolic Endoscopy: A Conversation with Dr. Roberto Simons-Linares, Director of Bariatric Endoscopy at the Cleveland Clinic, Cleveland, Ohio, USA and Dr. Christopher Thompson, Director of Endoscopy at Brigham and Women's Hospital, Boston, Massachusetts, USA



Vivek Kaul, MD

Chair, WGO Endoscopy, Other Procedures & Outreach Interest Group Rochester, New York, USA

Obesity along with its associated comorbidities has emerged as a world-wide public health problem. Medical therapy endoscopic therapy and surgical interventions for obesity have evolved rapidly over the last several years. Several multidisciplinary programs have been developed internationally to deal with this problem. The most rapid and dramatic evolution has occurred within endoscopic therapies for obesity which offer relatively minimally invasive solutions for patients with obesity and metabolic syndrome.

In this issue of *e-WGN*, Drs. Linares and Thompson review the current state-of-the-art for endoscopic approaches to obesity management and reflect upon aspects related to training, clinical care, program development and future areas of research. I had the opportunity to discuss several aspects of endoscopic obesity management and program development with Dr. Linares. In this accompanying Q&A where he sheds some light on his own personal journey along this paradigm, the key principles for successful program development as well as helpful suggestions for colleagues around the world who may be considering choosing this as a career pathway and or interested in developing endoscopic bariatric programs going forward. We hope that the pearls and caveats discussed in this conversation will be helpful for our readers and membership around the world.

Vivek Kaul (VK): Dr. Thompson, how did you get involved with this niche area of endobariatrics? Tell us a little about how your interest developed, your training and your pathway to specialization in this area.

Christopher Thompson (CT):

There was no real concept of bariatric endoscopy when I was in training. When I joined as faculty, our bariatric surgeons were requesting better organized and more streamlined gastroenterology care for their

patients. I quickly became responsible for preoperative evaluation and post-operative complication management for all of their patients. Also, I had an interest in NOTES at the time, had an active research lab, and was clinically performing a good number of advanced endoscopic procedures, including Zenker's septotomy and pancreatic necrosectomy.

During an advanced endoscopy fellowship, I had also learned how to suture using the Bard EndoCinch device to treat GERD, which, as it turns out, would be very relevant to my future practice. One afternoon I was performing an endoscopy on a patient with a Roux-en-Y gastric bypass (RYGB) and a history of refractory GERD with weight regain. There was an obvious gastro-gastric fistula between the pouch and the remnant stomach - and this is where it all came together for me. All I needed to do was use the same EndoCinch I was using to treat GERD, a few centimeters lower, to close that fistula! This had never been reported before, however, the surgeons were very supportive as it could potentially avoid a rather complicated surgical revision which carried significant morbidity at the time. The procedure required using the device in some novel ways, but it was successful. The GERD resolved and the patient began to lose weight. To me, this was the beginning of bariatric endoscopy.

We subsequently began to study the gastrojejunal anastomosis and its relationship to weight regain after RYGB, and shortly after developed the Transoral Outlet Reduction (TORe) procedure using the same EndoCinch. The hospital then provided me with funding to build out these programs and gave me the title, Director of Bariatric Endoscopy.

VK: Dr. Simons-Linares, you entered this field when it was well established. Please elaborate on your journey, as in: how did your interest develop for this field and your training pathway?

Roberto Simons-Linares (RSL): Since very early in my medical career, specifically medical school, I developed a strong interest for gastrointestinal endoscopy and I noticed that endoscopy is the missing link between clinical medicine and surgery. Then, I fell in love with everything endoscopy! While doing medical school rotations at the IRCAD center, University of Strasbourg Hospitals in France, I was exposed to the most novel endoscopic treatments in GI. I was lucky to be trained in gastroenterology and interventional endoscopy at the Cleveland Clinic under an extremely talented group of mentors that I'm now honored to call my partners. I was also very fortunate to do my bariatric and metabolic endoscopy fellowship at the Brigham and Women's Hospital of Harvard Medical School under Prof. Christopher Thompson and his team. I developed a passion for the field of endoscopic treatments for obesity and metabolic comorbidities, which affects more than one billion people worldwide – and with endoscopic therapies we can impact so many lives from a non-surgical approach.

VK: Dr. Simons-Linares, given that bariatrics has been in the surgical realm for so long, tell us the importance and value of collaboration with our surgical colleagues. How critical is it and how does one go about establishing that partnership? What is the recipe for developing that successful relationship?

RSL: The simple answer is that there is not "one size fits all;" the reality is that obesity is a chronic relapsing multi-organ disease that requires teamwork across multiple specialties. Teamwork between gastroenterologists (GI), bariatric endoscopists and bariatric surgeons is key to improve outcomes for patients suffering from obesity. This partnership should be transparent, dynamic, innovative and open to discussions on how to best help patients in need of bariatric procedures or surgeries. I'm very fortunate to work with a fantastic team of surgeons. On a daily basis we share patients, camaraderie, innovation and we continually strive for excellence in patient care and aim to advance the science through research.

GI bariatric endoscopists should always be there for surgical partners and take care of all endoscopy or GI clinical needs of our bariatric patients. I believe this is key to building relationships with surgeons, as well as other important specialties involved in the multidisciplinary team approach. To be more specific, in my case I'm not there only to do the cool bariatric cases and I do not have a policy that says "ESG referrals only" for example; but rather, I'm there for all my partners (surgeons and non-surgeons) that think I can be of help with my medical/GI background as well as with my interventional and bariatric endoscopic skills. I strongly believe this sincere, transparent multidisciplinary approach and collaboration ultimately benefits patients, providers, institutions and improves outcomes.

VK: Dr. Thompson, in terms of training, especially for endoscopists from low-medium resource environ-

ments, what advice do you have regarding training and achieving competence in these procedures? Please elaborate on the feasibility of hands-on workshops, sabbaticals, on site proctorships etc. in this realm.

CT: There are many different ways to develop the skills necessary to start an endobariatric practice. Each physician or surgeon has a different set of base skills and goals. There are several different starting points and individualized curricula that would be ideal. Nevertheless, a basic cognitive and technical foundation must be assured. Cognitive elements of endobariatrics are critical to good patient care. They include developing an understanding of obesity and its comorbidities, medical management of obesity, indications and risk profiles of the various procedures, patient selection, and complication management among other content.

The technical performance of procedures is also critical to a safe and effective practice. Procedures are typically categorized into Level 1 and 2 based on the level of skill required and length of learning curve to achieve competence. Level 1 procedures can typically be learned at a hands-on course with a modest level of clinical proctoring during initial clinical cases. Intragastric balloons are an example of Level 1 procedures. Level 2 procedures require a higher level of skill and experience to attain competency. These typically cannot be learned adequately at a hands-on workshop and often require training in the context of an advanced endoscopy program, or a sabbatical/clinical mentorship program with hands-on clinical train-

Not everyone will be able to start their practice with advanced endoscopic suturing techniques such as ESG or TORe. They may start with medical therapy and intragastric bal-

loons and need to build the more advanced skills over time in a mentoring program. More advanced endoscopy fellowship programs are including bariatric endoscopy in their curricula, and specialized bariatric endoscopy fellowships are also starting to appear. Simulators and longitudinal training programs are also being designed to help address some of the hurdles in training practicing clinicians. Additionally, new technology and simplification of procedural technique should help to shorten the learning curve for these procedures in the future. I am confident we will get there. We just have to grow the field safely and methodically.

VK: Dr Simons-Linares, any additional perspectives you would like to add as a recent trainee?

RSL: In 2020, the ASGE/ABE released a position statement on training and privileges for bariatric endoscopy. The statement described three essential principles for provision of quality endoscopic bariatric therapy (EBT): 1) broad and in-depth understanding of the management of patients with obesity, 2) mastery of GI endoscopic skills, and 3) procedure and device-specific knowledge necessary to provide specific EBTs and manage potential associated adverse events.

Outside of formal training, these skills can be acquired through obesity medicine society courses and or during residency/fellowship electives, rotations, as well as proctorships with existing bariatric endoscopy programs. I always recommend to reaching out to the GI endoscopy societies, and to the lead endoscopist in existing bariatric endoscopy programs, to ask for upcoming courses. There is also some data on competency for bariatric endoscopy: a study by Sharaiha et al. showed that endoscopic sleeve gastroplasty (ESG) efficiency was attained after 38 ESGs, and mastery after 55 procedures.

We definitely need to improve access to training in bariatric endoscopy at all levels but, as a trainee, be proactive, ask, ask and ask for opportunities and follow through!

VK: Dr. Simons-Linares, please elaborate on the importance of medical therapy in this realm. Where and how does medical therapy fit in with endoscopic and surgical bariatric interventions?

RSL: Anti-obesity medications (AOM) continue to develop nicely, with some AOM reaching >15% total body weight loss. AOM are safe, effective and non-invasive. However, to my earlier point, there is not "one size fits all" since we are dealing with a chronic relapsing disease of obesity, we need all hands on deck. Moreover, we live in a world of personalized medicine, innovation and evolving technologies, where patients should have access to all available therapies to help manage obesity, including lifestyle modification, surgery, AOM, and Bariatric Metabolic Endoscopy.

One interesting phenomenon I see happening more and more is the use of so-called "combination therapy" (AOM + bariatric endoscopy) and this appears very promising. As more combination therapy studies get published, we will see more indications and improved efficacy, and I suspect outcomes will be better for selected patients when combining AOM with bariatric endoscopy.

VK: Dr. Thompson, based on your experience, if one wants to setup an endobariatrics program, how do you recommend one go about it? What are some of the typical challenges and difficulties one should expect to encounter?

CT: There are many different ways to structure an endobariatric program. It is important to be flexible and shape the program around your assets. You can do this in an academic center, a private hospital, a group practice,

or as a solo venture. I have seen all models be successful, and any of them can fail.

No matter what the model, for it to be successful and deliver good patient care, you must adopt a multidisciplinary approach. You need a team that includes dieticians, psychologists, exercise physiologists or physical therapists, patient navigators and social workers. You also need to collaborate closely with surgeons, obesity medicine physicians, endocrinologists, hepatologists, cardiologists, and sleep medicine physicians. You can incorporate much of this as part of a unified service line with a shared front office, or you can be independent with a virtual multidisciplinary structure.

The independent model is in some ways easier if you can attract the financial resources and are willing to take the risk. Marketing is expensive yet critical to the success of such models. When attempting to build this in a traditional academic model. there are several hurdles. Care is siloed in the traditional model with separate cost centers, compensation plans, budgets and goals. Departments and divisions can behave in a tribal fashion, unwilling to truly cooperate at a service line level. This can be extremely difficult to overcome and requires buy in and support from the highest levels of the hospital if it is to be truly successful. Programs that have accomplished this have seen impressive results and been able to push the field forward and change practice with novel research initiatives. In the end, there are many different pathways to offer excellent care.

VK: Dr. Simons-Linares, how can we best partner with industry to further the goals of bariatric medicine going forward?

RSL: Industry is a key player in the field, as they continue to develop more devices and technology for bariatric endoscopy – it is important

to partner with them to continue to support research, device development, and increase access to education, hands-on courses, proctorships, and fellowships. I would encourage industry partners to keep investing in research and education in the field of bariatric endoscopy, as well as supporting GI societies in different strategic collaboration initiatives.

I would also suggest creating a "bariatric endoscopy program development summit" with experts that have had diverse experiences in developing successful bariatric endoscopy programs across all types of practices (private, academic, hybrid, etc.). This summit can offer not only clinical knowledge and hands-on training, but most importantly how to set up a successful bariatric endoscopy program (logistics, referral network, insurance/ payers, billing, multidisciplinary clinics, etc.) and even offer a long-term mentorship program to develop these programs across the globe.

VK: Dr. Simons-Linares, how can national and international societies help move the needle forward?

RSL: GI societies should invest heavily in bariatric endoscopy training and education (clinical-cognitive, hands-on endoscopic skills, and program development). It is important to realize that obesity is a chronic relapsing disease and the aim to develop solid high-quality bariatric endoscopy programs with excellent outcomes within GI should be a priority. The obesity pandemic is only worsening – for example, by 2030, half of the US population will have obesity, and currently more than one billion people worldwide have obesity. However, this is a unique opportunity for gastroenterologists and GI societies to step up and help lead the treatment of obesity.

VK: Drs. Thompson & Simons-Linares, what are the areas of future research and innovation that you are most excited about?

CT: There is a lot of opportunity to help this field grow with new procedures and new technology. As we better understand the pathophysiology of obesity, or just how to better manipulate normal physiology to get the desired treatment effects, we will achieve better outcomes and hopefully make procedures easier to perform.

I have been exploring third space endoscopy as a path to more consistent and durable results, but there are many other ways to achieve this. Small bowel therapies are just starting to enter pivotal trials in the US and they are showing promise. This means we may be on the verge of personalized endobariatric or metabolic therapies, and even combination therapies

that could deliver even better results than we have seen until now.

Additionally, evolution in technology is making procedures easier to perform. Whether it is new plication devices or patterns, improved balloons, endoscopic robotics or endoscopically delivered gene therapy, technology will no doubt continue to help this field develop.

RSL: As an endoscopist, I am incredibly excited of the future of device development and integration of robotics, artificial intelligence and newer technologies in the space of bariatric endoscopy (can't wait to see what devices I have in my hands in ten years from now!). However, I'm also very excited about the roles of the microbiome and combining AOMs with endoscopy to treat obesity. What if I could tell that we now have a pill that has an effective microbiome that will help you lose weight? Or keep the weight off along with the other established interventions?

I think we are heading towards that direction where bariatric endoscopy has a bright future, and it's a great opportunity for gastroenterologists to help lead the treatment of a very widely prevalent chronic disease such as obesity and its associated metabolic comorbidities.





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A Special Thank You to All WGO Volunteers



Guilherme Macedo, MD, PhD, MACG, FASGE, AGAF, FAASLD

President, World Gastroenterology Organisation Porto, Portugal

In honor of International Volunteer Day last week, I wish to extend a wholehearted thank you to all involved in the work of the World Gastroenterology Organisation, helping to fulfill our vision to be the global guardian of digestive health. Your unwavering commitment to WGO is very much noticed and appreciated. We could not do what we do without the support of our volunteers and members.

I appreciate that you donate your time and expertise to contribute to the important work that helps WGO achieve its mission. Together, we continue to promote an awareness of the worldwide prevalence and optimal care of gastrointestinal and liver disorders. We fight to improve the care of these disorders through providing accessible, high-quality, and independent education and training.

Thank you again for your dedication to WGO, the global gastroenterology community, and the patients we serve!

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Thank you again for your dedication to WGO, the global gastroenterology community, and the patients we serve!

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TTT's Triumphant Return



Kelly W. Burak, MD, FRCPC, MSc (Epid)

Chair, WGO Train the Trainers Committee Calgary, Canada

After completing a successful Train the Trainers (TTT) workshop in Bucharest, Romania in April of 2019, the TTT committee set out to refresh and reinvigorate the TTT modules in anticipation of workshops in Poland and France the following year. However, due to COVID-19, these workshops were postponed, sidelining large in-person meetings for more than two years.

Early in 2022, shortly after assuming the role of Chair of the TTT Committee, we were finally able to again consider in-person workshops. Work began to relaunch the traditional TTT and to try something new -an abbreviated course focused solely on medical education and improving your skills as a teacher.

Despite the ongoing challenges of the pandemic, and the war in Neighbor-

ing Ukraine, the Polish Society of Gastroenterology (PSG) remained keen to proceed and were phenomenal hosts as we relaunched the traditional four-day Train the Trainers workshop in Warsaw in early August. The extra time to prepare for this workshop was not wasted and allowed us to deliver an updated TTT curriculum, with new modules presented on a refreshed WGO template.

Warsaw, Poland, August 3-6, 2022

A new commitment from the TTT Committee to equity, diversity, and inclusion, resulted in an equal number of women being invited to participate as faculty. We were grateful to those who could make it, and



Train the Trainers faculty and participants joined together for a group photo in Warsaw this past August.

Enter one word that describes your TTT experience

"Feedback" stands out as a prominent theme in the word cloud created by participants.

some on very short notice. Faculty included Guilherme Macedo (Portugal), Geoffrey Metz (Australia), Anna Pietrzak (Poland), Aasma Shaukat (USA), Wojciech Marlicz (Poland), Nancy Fanous (Egypt), Georgina Gilca (Romania), Jean-Christophe Saurin (France), and Kelly Burak (Canada). A very special thank you goes out to Professor Grażyna Rydzewska (Past President of PSG), the local organizers, and our WGO staff (Marissa Lopez, Milly Gonzalez, and Zach Blevins) for making the meeting so successful.

Although always an integral part of the TTT workshops, this year we introduced a new module dedicated entirely to Feedback, which reviewed the important components of an effective feedback session and compared various methodologies. Participants had ample time to practice Pendleton's technique, and "feedback" featured prominently in the word cloud created by the participants during the workshop reflection

Three new workshops were also offered alongside the traditional hands-on endoscopy teaching skills workshop:

1) Group Discussions became a workshop on how to effectively lead small groups and was combined with an introduction to Bedside Teaching, which allowed participants to practice the



President Guilherme Macedo leads a group of participants in a small group work activity.

One-Minute Preceptor (1MP) and SNAPPS techniques

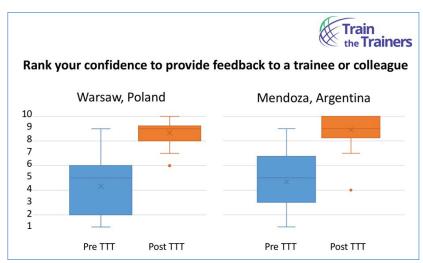
- 2) Lifelong Learning highlighted the role of coaching in medical education and demonstrated how audit and feedback can be used in competency-based continuing professional development
- 3) Career Longevity explored issues of burnout and how we can promote long and healthy careers in gastroenterology. The new workshops were all highly-rated and we received feedback that more time should be dedicated to their delivery.

Evidence based medicine, trial design and critically appraisal topics (CAT) were refreshed with a new CAT workshop delivered as a "flipped classroom" before a breakout that allowed participants to practise these skills on recent publications of randomized clinical trials. Other leadership modules delivered included effective teamwork, evaluation/credentialing, and professionalism.

As always, team building was a critical part of the TTT. This began the first night with a cooking competition that challenged the six small groups to prepare various traditional Polish



Michal Dubowik, Anna Jablanska, Jarosalw Koza, and Liliana Mendes cook up something delicious at the team culinary night in Warsaw.



Participants measured significant growth in their confidence in both post course evaluations.

dishes. The cultural night highlighted the diverse backgrounds of our nine faculty and 41 participants, who came from a total of 22 countries. During the meeting we were treated to a tour of Warsaw, amazing food, and a Frédéric Chopin piano concert.

The workshop concluded with a renewed focus on measuring the impact of TTT. In the self-efficacy evaluation, participants were asked to rank their confidence on the learning objectives of the course, before and after the TTT, on a scale of 1 (not confident) through 10 (very confident). All comparisons were statistically significant, although the largest self-reported change in confidence was seen in their ability to "provide feedback to a trainee or colleague." Participants were also asked to identify three concrete actions to which they will commit after returning from TTT, and these Commitment to Change forms will be sent back to them three months later to determine if they followed through on these changes.

Mendoza, Argentina, September 14-15, 2022

In September, in association with the Federación Argentina de Gastroenterología (FAGE), we held a Spanish TTT (Curso de Impacto en la Ensenanza or Teaching Impact Course) as a pre-course to their annual meeting in Mendoza, Argentina. This was a departure from our traditional TTT (four days) or advanced TTT workshops (two days), in that the majority of the content was delivered over just one day.





José María Sanguinetti (Argentina) and Carolina Olano (Uruguay) demonstrating the One Minute Preceptor and SNAPPS.



Faculty and participants pose together for a group photo at the TTT session in Mendoza this past September.

Special thanks go out to José María Sanguinetti (Argentina) and Carolina Olano (Uruguay) for their help planning the course and translating the TTT education modules into Spanish. The other faculty that completed the "Dream Team" were Alejandro Piscoya (Peru), Mário Reis Álvares-da-Silva (Brazil), Luis Carlos Sabbagh (Colombia), and Kelly Burak (Canada). We had a total of 27 participants, from Argentina, Peru, Uruguay and Brazil.

To help with group dynamics, four small groups were established ahead of time on WhatsApp and were tasked to come up with a group name. On the first evening, following the introductory module on adult education, groups revealed their team's name and introduced their members, after which we all enjoyed Argentine wine and food while getting to know each other.

The following morning included modules on presentation skills, leading small groups, teaching skills and the hands-on endoscopy workshop, which ran opposite the lifelong learning workshop. The morning ended with a small group breakout on education topics and a report back, where presentation skills and giving feedback were practiced.

After a break to attend to the opening ceremony of the GASTROENDO 2022, modules on bedside teaching and evaluation were followed by a second breakout focused on evaluation and continuing professional development topics. In the second report back, it was remarkable to see how the quality of presentations and the feedback provided improved, showing how quickly effective group dynamics developed.

As in Poland, the day ended with reflections on the course, the evaluation and the famous, and very fun, QUIZ! The self-efficacy results for the education modules were remarkably similarly to those seen in Poland, with the greatest improvement in confidence being seen in "coaching" and "providing feedback." This shows us that we met the stated objectives of the course and that a shorter TTT can have impact on participants. However, feedback from faculty and participants alike suggests that two days may be better for future offerings.

Most importantly, both courses proved that adults learn best when it is fun, and our time in both Warsaw and Mendoza were "imuy divertido!" Faculty and participants left the meetings with new friends and many great memories, but more importantly, new skills that will hopefully have a longlasting and far-reaching impact.

What is next for TTT?

The TTT recently celebrated its 20th Anniversary, and we have come a long way since Professor Jim Toouli organized that first course in Crete in 2001. We have presented a total of 30 TTT courses and now have nearly 1,200 TTT alumni. We look forward to reflecting on our successes with presentations about Train the Trainers at the World Congress of Gastroenterology in Dubai. In 2023, and beyond, we to hope to organize one or two traditional TTTs (4 days) annually, and now going forward we can welcome Medical Education to our line up for our advanced 2-day TTT workshops.

WGO Train the Trainers Alumni Testimonials

Developed in 2001, the Train the Trainers (TTT) program concentrates on expanding the educational skills of educators in the fields of gastroenterology, hepatology, endoscopy, and GI surgery, who are responsible for teaching, using current educational techniques and philosophies. It brings together faculty and participants from across the globe in an intensive and interactive workshop, characterized by numerous hands-on sessions with many opportunities for discussion. TTT is dedicated to the development of teaching and training skills.

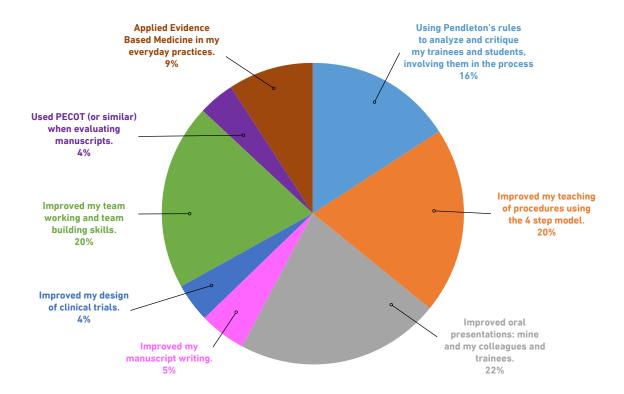
Over the past 20 years, 30 workshops have been held in 20 different countries across six continents with over 1,200 alumni from more than 90 countries.



A map of where TTT alumni live



TTT Warsaw participants and faculty exploring Old Town.



TTT: 2022 - Mendoza, Argentina

I recently had the pleasant experience

of participating in the Train the Train-

tina. Initially, I had the preconception

ers course held in Mendoza, Argen-

that it was going to be just another

course, similar to the many others I

have experienced during my career. I

expected to find myself with a classic

conventional course, which I would

take away a few useful concepts for

my teaching practice.



María Marta Piskorz, MD Buenos Aires, Argentina



Yéssica Pontet, MD, MSc Montevideo, Uruguay

I attended the TTT held in Mendoza, Argentina and would like to summarize my experience. I will describe my group as doctors who enjoy teaching and who are focused on enhancing their teaching skills. Although this was the first condensed version of TTT, it was thoughtfully concentrated and just as effective as could be. I learned how important it is to give and receive feedback, in addition to the fundamental strategies to help improve the intention of feedback. I also learned the importance of working as a team while organizing clear objectives to achieve effective presentations. The faculty of this course carry their vocation of teaching to excellence and stressed the importance of utilizing a coach throughout our teaching careers.



Esteban Hugo Campitelli, MDBuenos Aires,
Argentina

I send my thanks for the beautiful memory. It has been a valuable experience for me. I was asked why I decided to participate in this TTT, and as a professor/faculty, and head of service, the answer was simple. I attended on behalf of my peers so that I can be a motivator to other teachers. I didn't come to TTT to show you what I'm good at, I came to TTT to learn what I can't do.

set and throughout the course on how interactive and relevant the topics were. The program provided me with enormous learnings and takeaways.

I was impressed by the level of knowledge of the faculty. They delivered the materials and talks in an

However, I was surprised at the on-

knowledge of the faculty. They delivered the materials and talks in an engaging, dynamic and fun format. This was a course in which I learned to transfer autonomous thinking to the classroom with students. The faculty taught us to lead the learning process and nurture ourselves as teachers, focused on the topics of interaction and feedback. In addition, they taught us that mistakes are an opportunity to learn, as opposed to the classic negative model.

The course was fun, agile, modern, and full of surprises.

I hope to meet the participants and faculty again.



TTT Mendoza participants work together in breakout groups to discuss what they have learned.

Training Center Spotlight: Nairobi



Miriam Muriithi Gatehi, MBChB, MMED

GI Fellow, World Gastroenterology Organisation Nairobi, Kenya

My admission into the WGO Training Center program in Nairobi for 2021-2022 was exhilarating to say the least, and I quickly presented an acceptance letter to my supervisors. We met with them a few weeks later for orientation. Our main supervisors were Prof. Elly Ogutu (Director of the Nairobi Training Center), Dr. Stephen Onyango, Dr. Jongsup Lee, and Dr. Ngugi.

During the first meeting, the excitement was palpable among the new trainees. My first-year colleagues were Dr. Rupal Maru and Dr. Okanga. The first day was an introduction to the unit as well as an orientation of what our objectives were for the program.



First year WGO fellows with Dr. Lee: From left: Dr. Rupal Maru, Dr. Jongsup Lee, Dr. Okanga, Dr. Miriam Muriithi

I clearly remember our first reporting day. It was an unusually warm day full of birds chirping and we entered a long corridor which exited to the endoscopy unit. There, we saw two main theatres, a recovery room, procedure room, doctor's office, and a staff room. For the number of patients waiting at the lobby, the unit appeared relatively small, though accommodating. The unit was relatively busy with an average of 25-30 procedures per day.

Procedures performed here included upper GI endoscopy, lower GI colonoscopy, therapeutics, esophageal stenting, dilatation, peg tube, cauterization, and polypectomies as well as ERCPs. Students were expected to report daily from 8am-5pm with one free day in-between the week,



From Left: Dr. Olivia Kyeni, Dr. Rupal Maru, Dr. Jongsup Lee, Dr. Miriam Muriithi.



Demonstration with students at the endoscopy unit

which is reserved for research. The first-year trainees have an observatory role for one month during which we undertake an intense training on the handling and cleaning of the scope. The second month is reserved for an introduction to upper GI diagnostic endoscopy. Dr. Jongsup Lee was our primary lecturer, and we had set targets over a 12-week period.

I recall our first target was intubating the stomach pylorus, a procedure which gave us sleepless nights for three weeks! I remember extensively reading on upper GI techniques and eagerly watching videos that appeared daunting at first. During our tea break, the first-year trainees would lament how hard it was to intubate the pylorus. If only we knew that in 6 months' time we would be performing OGDs with our eyes closed, literally. I remember the first student to intubate the pylorus was my colleague Dr. Rupal Maru, who had to buy pizza for the whole department as a gift for the teaching received. She was elated. Dr. Okanga and I would soon catch up and realize that teamwork was more important than who competitively reached a goal first. Together we would achieve considerably more. The nurses in endoscopy have been very patient and willing to assist us, even now, as we perfect our colonoscopy and therapeutic skills.

It is important to note that the wards and clinic played an integral part in our learning. We enjoy procedures more, but it is mandatory that all fellows perform two ward rounds per week, as well as a full day of clinic on Thursdays. On most evenings, we have group work or weekly classes which were conducted online. Morbidity, mortality, and grand round meetings are reserved for once a month.



The endoscopy team of nurses and staff



The endoscopy team of physicians and nurses

Currently, we are perfecting our skills in colonoscopy and therapeutic upper and lower GI procedures.

We have developed a strong bond with our senior graduating class of 2022 as well as our lecturers, nurses, and support staff, not to mention our patients. We have had our high moments, such as when I performed my first polypectomy, but also some low moments, such as losing patients with advanced cancer or liver failure. At the end of the day, what I have realized is that despite my deep love for gastroenterology, I need to maintain a balanced life for my physical and mental health.

I strive to incorporate daily exercise, meditation, and meeting with friends and family outside of my gastroenterology training. We have informal meetings with our lecturers where we share meals as well as celebrate important life milestones like birthdays or anniversaries. One such occasion was a farewell party for one of our lecturers Dr. Jongsup Lee who took a one-year leave to travel to his home country Korea. He has been invaluable to our training and we value him deeply.

Going into my second year, I hope to continue practicing my skills. I have a keen interest in gastrointestinaloncology and hope to complete my study on esophageal cancer. The title of my study is "Nutritional Outcomes in Advanced Ca esophagus patients with Esophageal stents vs

PEG tube." Thereafter my dream is to work in a remote area in Kenya and help as many patients there as I can.

Lastly, I thank the World Gastroenterology Organisation for providing me with this opportunity to train in my dream specialty. I do not take it for granted. Asante! (the Kiswahili word for thank you)



WGO fellows with visiting faculty



WGO fellows (Dr. Miriam Muriithi, Dr. Rupal Maru, and Dr. Linda Gathara) relaxing at a coastal event

Training Center Spotlight: Addis Ababa



Zelalem Mulu, MD

GI Fellow, Tikur Anbessa Specialized Hospital



Wudassie Melak, MD

GI Fellow, Tikur Anbessa Specialized Hospital Ethiopia



Senior staff of Tikur Anbessa Specialized Hospital (TASH)



Fellows currently training at TASH

The WGO Training Center in Addis Ababa, located at the Tikur Anbessa (Black Lion) Specialized Hospital (TASH), has been training fellows in both diagnostic and therapeutic upper GI endoscopy and colonoscopy. Two fellows, Dr. Wudassie Melak and Dr. Zelalem Mulu, have trained for the past year.

We, the trainees, were practicing as internists from the countryside of Ethiopia and with the hope of delivering the services to the local community in the regions. We joined the training program in 2021. Our stay was fruitful and we were extremely pleased with the knowledge and skill

we gained from the senior staff and

Prof. Mark Topazian was constantly helping us with our training by discussing selected clinical cases, assisting with endoscopic procedures, and even providing endoscopic supplies and accessories (particularly esophageal variceal ligation bands).

Dr. Amir Sultan, director of the Addis Ababa Training Center, along with the rest of senior staff, have guided us with tremendous support throughout our training experience. During our time at the training center, they have supported us through clinical case discussions, diagnostic/therapeutic

endoscopic procedures, and diagnostic ultrasound imaging

There are four new trainees at the unit: three adult and one pediatric gastroenterology/hepatology fellows. We have regular meetings, seminar presentations, and monthly fellow journal presentations. We are also involved in general GI clinic & ward activities. We do regular endoscopic and colonoscopic procedures with our trainers from Tuesday to Thursday (three times per week) as well as emergency procedures.

All trainees are also involved in research activities. While the data collection is ongoing, the study titles that are being done currently include:

- 1. Prevalence, pattern, and risk factors of MAFLD/NAFLD in IBD patients having follow up at GI clinic of Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia.
- 2. The predictive value of alarm symptoms and signs for significant endoscopic findings and upper GI malignancy: an institution based cross-sectional study in Addis Ababa, Ethiopia.

Finally, we greatly thank WGO for the unreserved great support during our successful stay and the follow up of our clinical and endoscopic activities at Addis Ababa, Ethiopia.

Recordings Available from The Global Burden of Viral Hepatitis Webinar Series

WGO's Hepatology Interest Group, in celebration of World Hepatitis Day, organized a webinar series examining viral hepatitis over three webinar installments. Globally, 354 million people live with hepatitis B or C. In addition, hepatitis is one of the most deadly diseases - claiming the life of someone every 30 seconds. Entitled *The Global Burden of Viral Hepatitis*, expert speakers provided important information on various topics relating to hepatitis D, hepatitis C, and hepatitis B.

Webinar recordings for all sessions are now available on the WGO website. We invite you to view these vital discussions so that we can work toward eliminating viral hepatitis together. Below is the complete series overview.

The Global Burden of Viral Hepatitis – Breakthroughs in Hepatitis B

Speakers & Topics:
Prof. Rui Tato Marinho (Portugal)

– Push for Universal Screening and
Vaccination Updates
Prof. Ebada Said (Egypt) – Indications
for Treatment and Potential Areas for
Expansion

Prof. Suna Yapali (Turkey) – Stopping Rules and Risk for Relapse

The Global Burden of Viral Hepatitis – A Closer Look at Hepatitis C

Speakers & Topics: Prof. Mohamed El-Kassas (Egypt) – Screening Guideline Changes Prof. Rui Gaspar (Portugal) – Simplified Therapy Prof. Mustapha Benazzouz (Morocco) – Opportunities for Microelimination

The Global Burden of Viral Hepatitis – Developments with Hepatitis D

Speakers & Topics:
Prof. Cecilia Cabrera (Peru) – Epidemiology and Risk Factors
Prof. Alice Lee (Australia) –
Screening and Diagnosis Algorithm
Prof. Nancy Reau (USA) – Current Therapy and Data on New
Therapy Close to Market



Click here to view the recordings

ISDE 2022 Summary



Simon Law, MBBChir (Cantab), MS(HK), PhD(HK), FRCSEd, FCSHK, FHKAM

Chair and Chief, Division of Esophageal and Upper Gastrointestinal Surgery Hong Kong SAR, China

The 18th World Congress for Esophageal Diseases (ISDE 2022) was originally scheduled to take place in beautiful Tokyo, Japan, in conjunction with the 76th Annual Meeting of the Japan Esophageal Society. Tokyo had all the ingredients to make this gathering a great meeting, with its culture, gourmet food, infrastructure, and facilities.

Unfortunately with COVID-19 still rampant, given the implications of travel restrictions, and ultimately for the well-being of the ISDE community, the ISDE Board of Directors believed moving to a virtual-only format to be the best solution. The transition from a hybrid to virtual meeting allowed for an equally exciting, content rich, network driven, and safe congress.

The program was developed by the Program Committee under the guidance of the Co-Chairs Simon Law (The University of Hong Kong, Hong Kong SAR, China), Chika Kusano (Kitasato University, Japan), and Paul Schneider (Hirslanden Medical Center, Switzerland), with input from Hideaki Shimada, President of the JES Congress (Toho University, Japan).

The opening keynote was presented by Ken Kato and entitled "Precision and Personalised Oncology for Esophageal Cancer." Professor Kato is Chief of the Department of Head and Neck, Esophageal Medical Oncology, Chief of the Department of Gastrointestinal Medical Oncology, and Chief of the Biobank Translational Research Support Section, Clinical Research Coordinating Section, Clinical Research Support Office at the National Cancer Center Hospital, Tokyo, Japan.

The Presidential Lecture, entitled "Population Screening for Esophageal Cancer. How Can We Make It Work?," was given by the President of ISDE, Sheila Krishnadath. Professor Krishnadath works as a gastroenterologist and principal investigator at the University Hospital of Antwerp. She has a long-standing track record on translational research on esophageal diseases. Her work mainly focuses on Barrett's esophagus and esophageal adenocarcinoma.

The Japan Esophageal Society (JES) hosted three sessions focusing on the latest JES guidelines for esophageal cancer - JES Guideline on Oncologic Treatment for Esophageal Cancer, JES Guideline on Endoscopic Treatment for Esophageal Cancer, and the JES Guideline on Surgical Treatment for Esophageal Cancer.

Two affiliated societies of ISDE also organized their respective forums. The Chinese Society for Diseases of the Esophagus (CSDE) discussed various treatment strategies for esophageal cancer in the session "What are the Optimal Treatment Regimens

for Esophageal Cancer?," while the European Society for Diseases of the Esophagus (ESDE) focused on "Oligometastatic Disease in Esophageal Cancer: Moving Landscape in the Era of Immunotherapy."

The Diseases of the Esophagus Festival session was aimed at honoring and paying tribute to the individuals who had contributed most to the success of the journal during the last two years. The six most cited articles published in Diseases of the Esophagus (DOTE) were presented.

Diseases of the Esophagus (DOTE) presented the Best Junior Faculty/ Trainee Manuscript Award to the top original research manuscript by a junior faculty or trainee author accepted for publication in the journal in 2021. DOTE also presented the Outstanding Junior Faculty Peer Reviewer Award to the top junior faculty Peer Reviewer of 2021 for the journal. This year's winners are Dr. Yoshitaka Ishikawa (University of Michigan, USA), and Dr. Alice Tsai (Imperial College Healthcare NHS Trust, United Kingdom).

DOTE published a special ISDE 2022 DOTE Congress Supplement (Volume 35, Issue Supplement 2, September 2022), containing all abstracts submitted to the 18th ISDE World Congress for Esophageal Diseases. The supplement is now available online.

ISDE is committed to the advancement and support of trainees, fellows, and early career individuals, and were pleased to introduce the formation of Young ISDE, a new standing committee within the ISDE. The goals of the committee are: the development of new knowledge, advancing understanding of esophageal diseases, promoting education and knowledge

exchange amongst trainees and young investigators, facilitating networking, and providing information on training and fellowship opportunities.

This newly established committee showcased their first session at ISDE 2022, covering the topics of "Building a Career in Translational Research," "Developing Esophageal Clinical Trials in 2022," "Creating the Next Generation of Allied Health Professional Researchers," and "Establishing International Research Collaboratives."

More than 50 scientific sessions were presented at the congress, offering a multitude of opportunities for

education and networking, encompassing panel discussions, and video and oral presentations. There were close to 100 speakers and over 500 oral and poster abstract presentations. The EECCME granted a total of 15 credits for the program. These credits are transferrable to Category 1 credits.

The Congress was well attended with close to 600 participants, including 160 participants from Japan. All sessions and presentations were recorded and are available to registrants for on-demand viewing on the virtual Congress platform until December 31, 2022.

ISDE would like to extend its sincere appreciation to all attendees, speakers, contributors, and committee members for making ISDE 2022 the extraordinary success that it was. A special thank you is extended to Professor Hideaki Shimada of the Japanese Esophageal Society (JES) for his exceptional assistance, support, and partnership. We look forward to seeing everyone again in September 2023 in Toronto face-to-face for the 19th World Congress of ISDE.

WGO Guidelines and Cascades News

Updated Endoscope Disinfection Guideline Published in the Journal of Clinical Gastroenterology

The Journal of Clinical Gastroenterology (JCG) is the official publication platform for WGO's Global Guidelines in the English language. WGO is also represented on the JCG Editorial Board. WGO is pleased to announce that the recently updated Endoscope Disinfection has now been published in the *JCG*.

The WGO Endoscope Disinfection Guideline is intended for use by health providers and professionals who are involved in the use, cleaning, and maintenance of endoscopes and aims to support national societies, official bodies and individual endoscopy departments in developing local standards and protocols for reprocessing endoscopes.

This updated Endoscope Disinfection Guideline was chaired by Prof. Tony Speer of Australia and addresses the recent outbreaks of multi-drug

resistant organisms after endoscopy and proposes measures to reduce the risks of these outbreaks occurring. The recommendations are based on the consensus findings of an international multidisciplinary working group with expertise in microbiology, including biofilms, endoscope reprocessing, nursing, and gastroenterology, and with broad experience in developing national and international reprocessing guidelines.

The Guideline can be access below and can be officially cited as: Journal of Clinical Gastroenterology: September 7, 2022 - Volume - Issue -10.1097/MCG.0000000000001759 doi: 10.1097/

MCG.000000000001759

WGO anticipates publication of the updated Helicobacter Pylori as well as the new Digestive Tract Tuberculosis Guidelines in upcoming issues of the *JCG* as well.





A Resource Sensitive Solution

Click here to access WGO Guideline—Endoscope Disinfection Update

Calendar of Events

Due to uncertainties of scheduling from the COVID-19 situation, please check the WGO Meetings and Events Calendar for the latest updates at https://www.worldgastroenterology.org/meetings/meetings-and-events-calendar

WGO RELATED EVENTS

World Congress of Gastroenterology 2022

When: December 12, 2022 - Decem-

ber 14, 2022

Location: Dubai, United Arab Emir-

ates

Organizers: WGO and the Emirates Gastroenterology and Hepatology

Society

Website: https://wcog2022.org/

World Congress of Gastroenterology 2023

When: November 15, 2023 - Novem-

ber 18, 2023 Location: Seoul Country: Korea

Organizer(s): WGO and The Korean

Society of Gastroenterology

Website: <a href="https://www.worldgastroen-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/world-congress-terology.org/meetings/world-congress-terology.org/meetings/world-congress-terology.org/world-congress-terology.org/world-congress-terology.org/world-congress-ter

of-gastroenterology

CALENDAR OF EVENTS

Annual Meeting of the Gastroenterological Association of Thailand 2022

When: December 15, 2022 Location: Pattaya, Chonburi

Country: Thailand

Organizer: Gastroenterological As-

sociation of Thailand

Website: http://www.gastrothai.net

ISGCON

When: January 5, 2023 - January 8,

Location: Jaipur Exhibition and Con-

vention Centre **Address:** Jaipur, India

Organizer: Indian Society of Gastro-

enterology

Website: https://www.isgconjaipur.

com/

APASL 2023

When: February 15, 2023 - February

19, 2023

Location: Taipei International Conven-

tion Center

Address: Taipei, Taiwan

Organizer: Asian Pacific Association

for the Study of the Liver Website: www.apasl2023.tw

Canadian Digestive Diseases Week™ 2023

When: February 28, 2023 - March 5,

2023

Location: Halifax, Nova Scotia

Country: Canada

Organizer: Canadian Association of

Gastroenterology

Website: https://www.cag-acg.org/

cddw

The 53rd Annual Meeting of GEST

When: March 25, 2023 - March 26,

2023

Country: Taiwan

Organizer: Gastroenterological Society

of Taiwan

Website: http://www.gest.org.tw

26th Annual Meeting of the Asociacion Espanola de Gastroenterologia

When: March 28, 2023 - March 31,

2023

Location: Madrid **Country:** Spain

Organizer: Asociacion Espanola de

Gastroenterologia

Website: http://www.aegastro.es

Digestive Disease Week® (DDW)

When: May 6, 2023 - May 9, 2023 Location: McCormick Place Address: Chicago, Illinois, United

States

Organizer: DDW Website: https://ddw.org/

2023 International Liver Congress™

When: June 21, 2023 - June 25, 2023

Location: Vienna Country: Austria Organizer: EASL

Website: https://easl.eu/event/easl-

congress-2023/

IFSO Congress 2023

When: August 30, 2023 - September

1,2023

Location: Naples Country: Italy Organizer: IFSO

Website: https://www.ifso.com/world-

congress/

Semana Panamericana de las Enfermedades Digestivas 2023

When: October 8, 2023 - October 11,

2023

Location: Santiago Country: Chile

Organizer(s): Organización Panamericana de Gastroenterología and Sociedad Interamerican de Endoscopia

Digestiva

Website: https://www.opge.org/sitio/

UEG Week 2023

When: October 14, 2023 - October

17, 2023

Location: Bella Center

Address: Copenhagen, Denmark Organizer: United European Gastro-

enterology

Website: https://ueg.eu/week

JDDW 2023 - Japan Digestive Disease Week 2023

When: November 2, 2023 - Novem-

ber 5, 2023

Location: Kobe, Japan

Organizer: Organization of JDDW

JDDW 2024 - Japan Digestive Disease Week 2024

When: October 31, 2024 - November

3, 2024

Location: Kobe, Japan

Organizer: Organization of JDDW Website: http://www.jddw.jp/english/

index.html

APASL 2024

When: March 27, 2024 - March 31,

2024

Location: ICC Kyoto Address: Kyoto, Japan

Organizer: Asian Pacific Association

for the Study of the Liver

Website: www.apasl2024kyoto.org

JDDW 2024 - Japan Digestive Disease Week 2024

When: October 31, 2024 - November

3, 2024 **Location:** Kobe **Country:** Japan

Organizer: Organization of JDDW Website: http://www.jddw.jp/english/

index.html

WGO Member Societies Submit Your Event

Are you a WGO Member Society wanting to share your event with WGO readers? Visit https://www.worldgastroenterology.org/forms/submit-event.php to submit your event for publication in WGO's website conference calendar as well as the quarterly *e-WGN* calendar of events!



DONATE TODAY

Contributions to WGO support and expand the educational, training, research, and awareness programs and initiatives of WGO by strengthening the reach of WGO to areas in the world that benefit directly from the education offered through programs such as Training Centers, Train the Trainers, World Digestive Health Day, Global Guidelines, and international meetings such as the World Congress.

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