

**BARIATRIC AND THERAPEUTIC ENDOSCOPY
FELLOWSHIP ATTACHMENT PROGRAMME IN SGH**

Components	Information
1. Division/ Department	Medicine/ Department of Gastroenterology & Hepatology
2. Title of Programme	Fellowship Training in Bariatric and Therapeutic Endoscopy
3. Relevant Registrations	<ul style="list-style-type: none"> • Temporary Registration with Singapore Medical Council (SMC) • Training employment pass application with Ministry of Manpower, Singapore (MOM) (upon successful Temporary Registration with Singapore Medical Council)
4. Overview 4.1 Background information	Singapore General Hospital is a tertiary care hospital. The department of Gastroenterology and Hepatology caters to a broad spectrum of GI diseases and is equipped with state-of-the-Art technologies. The interventional and bariatric endoscopy training program aims to train interested candidates in advanced endoscopic techniques, including endoscopic resection (EMR/ESD/POEM), therapeutic procedures like enteroscopy, stenting, dilatation, GI bleed management, and advanced endoscopic bariatric procedures. Besides, training in EUS will be considered based on performance. The unit performs approximately 60 primary bariatric procedures, 300 EUS, and 200 other therapeutic endoscopic procedures in a year.
4.2 Goal/ aim(s)	The objective of the fellowship training is to build and develop physicians who can acquire new skills and deliver quality care to patients in their country of origin. We wish to develop physician endoscopists who can advance the field further and continue to have a research mindset.
4.3 Duration	12 months
4.4 Hyperlinks/URL Sites	https://www.sgh.com.sg/Clinical-Departments-Centers/Gastroenterology-Hepatology/Pages/overview.aspx
5. Target Audience	Fellows who have completed their basic Gastroenterology fellowship and who are proficient in basic endoscopy
5.1 Pre-requisite /eligibility requirement(s)	<p>General requirements for Temporary Registration for training (required by SMC):</p> <ul style="list-style-type: none"> • A basic medical degree from an accredited medical university or medical school • Passed the relevant national licensing examination in the country of conferment of conferment of basic degree, where applicable • Evidence of at least 12 months houseman-ship / internship with a certificate of satisfactory completion of houseman-ship or equivalent • Been registered as a medical practitioner in the country where he is currently practising • Been certified to be of good standing by the Medical Council or the relevant national authority <p>Note: The doctor should be in active clinical practice (and been registered as a medical practitioner in the countries of practice) for the 3 years preceding the application for medical registration in Singapore.</p>

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	<p>In addition to the above criteria, Clinical Fellows must:</p> <ol style="list-style-type: none"> Have a minimum of 3 years working experience as a medical officer (or equivalent) Fulfil English Language requirements of SMC if the medium of instruction for the basic medical qualification is <u>not</u> in English Preferably have obtained a postgraduate diploma or medical degree in his country or overseas Be sponsored by (i) the government, or (ii) regional health authority or (iii) an appropriate institution in the home country. For (d)(iii), the doctor must be on current full-time employment (40 hours or more per week) with the sponsoring institution. <p>As a Clinical Fellow, the doctor will be allowed to be involved in patient care and make entries in patients' case note, communicate care plans to patients and fellow healthcare professionals, and perform procedures under <u>direct</u> supervision or Level 1 supervision under SMC's Supervisory Framework.</p> <p>Department's requirement, if any (only for Clinical Fellow in this subspecialty):</p> <ul style="list-style-type: none"> Post graduate qualification such as MRCP or its equivalent is required.
<p>6. Learning Objectives</p>	<p>Direct care of both in-patients and outpatients is included. The fellow will be expected to be involved in the pre-procedure evaluation and post-procedure management of the patients. During the hands-on training period, the fellow will be expected to participate in clinical research and departments academic activities. The trainee will also be expected to present at journal clubs and meetings on topics relevant to their training. Additionally, the trainees will be rotated to other disciplines within the obesity center to get complete exposure to multi-faceted obesity care.</p> <p>Two months will be allocated for general gastroenterology, whereby the fellow will function as a registrar of a GI team supporting a supervising consultant. During this period, the priority will focus more on general GI work and supporting the general GI team.</p>
<p>7. Course/Training Syllabus</p>	<p>a) Bariatric Endoscopy</p> <p><u>Non-Technical Skills</u></p> <ul style="list-style-type: none"> Learn the indication and contra-indications Selecting the appropriate endoscopic treatment Understanding diet and follow-up Learning the physiology changes with Obesity and post-treatment Understanding bariatric surgical complication <p><u>Technical Skills</u></p> <ul style="list-style-type: none"> Intragastric balloon implantation and removal (Hands-on under supervision) Endoscopic suturing/Plication for obesity treatment (Assist and learn) Endoscopic bariatric surgical revision procedure (Assist and learn) Trans-Oral outlet reduction (Assist and learn) <p>You will be trained in using the endoscopic suturing device, plication devices (POSE) and its accessories.</p>

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	<p>b) Endoscopic Resection</p> <p><u>Non-Technical Skills</u></p> <ul style="list-style-type: none"> - Learn polyp characterization - Submucosal invasion assessment - Learn indications and contraindications of ESD and third space endoscopy - Electrocautery settings and Snare selection <p><u>Technical Skills</u></p> <ul style="list-style-type: none"> - Become proficient in cold snare polypectomy - Become skilled in dynamic submucosal injection technique - Become proficient with endoscopic loop ligation - Perform chromoendoscopy - EMR for small lesions and large lesions - Become proficient with Band EMR - Assist in ESD (Hands-on depending on proficiency)/POEM and other third space procedures <p>c) Therapeutic Endoscopy</p> <p><u>Non-Technical Skills</u></p> <ul style="list-style-type: none"> - Learn techniques of different clipping - Learn about glue injection and therapies - Dilatation techniques - Understand different types of enteral stents <p><u>Technical Skills</u></p> <ul style="list-style-type: none"> - Become proficient in band ligation and gastric varix injection - Become confident and experienced in non-variceal bleeding management - Hands-on in endoscopic dilatation - Hands-on in Endoscopic stenting - -Hands- on in Balloon enteroscopy/Spiral enteroscopy - Hands-on in Direct and In-direct PEG placement/ feeding tube insertion - Hands-on in hemorrhoid band ligation <p>d) Endoscopic Ultrasound (optional)</p> <ul style="list-style-type: none"> - Diagnostic EUS and elastography - EUS staging - Tissue acquisition techniques
<p>8. Training Method</p>	<p>Method of Supervision: Direct observation and feedback. Clinical Fellow will be supervised by an assigned supervisor at all times.</p> <p>Hands-On Experience: Fellows will perform or assist in the following procedures under supervision:</p> <ol style="list-style-type: none"> 1. Daily endoscopies supervised by advanced endoscopy Consultant/Senior Consultant 2. Daily review of pre procedure and post procedure patients 3. Attend X-ray meetings, histology meeting, MDT obesity meeting, and tumor board meetings

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	<p>4. Research work mentored by advanced endoscopy Consultant/Senior Consultant</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="background-color: #D3D3D3;">TRAINING ACTIVITIES & METHODOLOGY</th> </tr> <tr> <th style="background-color: #D3D3D3;">Name of activity</th> <th style="background-color: #D3D3D3;">Frequency / No. of sessions / Length of session</th> <th style="background-color: #D3D3D3;">Teaching methodology</th> </tr> </thead> <tbody> <tr> <td>Daily pre procedure assessment</td> <td>Daily 1 hour</td> <td>Discussion on indications for procedure</td> </tr> <tr> <td>Daily post procedure assessment</td> <td>Daily 1 hour</td> <td>Discussion on complications of procedure</td> </tr> <tr> <td>Endoscopy Sessions</td> <td>4 dedicated endoscopy sessions a week. (Additional sessions will be arranged based on performance)</td> <td>Direct supervision</td> </tr> <tr> <td>Journal club, didactic teaching sessions</td> <td>Weekly 1-2 hours</td> <td>Didactic, discussion</td> </tr> <tr> <td>Multidisciplinary Obesity meeting</td> <td>Fortnightly</td> <td>Multidisciplinary discussion</td> </tr> <tr> <td>Multidisciplinary tumour board meeting</td> <td>Weekly 2 hour</td> <td>Multidisciplinary discussion</td> </tr> <tr> <td>Multidisciplinary Histology meeting</td> <td>Monthly 1 hour</td> <td>Multidisciplinary discussion</td> </tr> </tbody> </table>	TRAINING ACTIVITIES & METHODOLOGY			Name of activity	Frequency / No. of sessions / Length of session	Teaching methodology	Daily pre procedure assessment	Daily 1 hour	Discussion on indications for procedure	Daily post procedure assessment	Daily 1 hour	Discussion on complications of procedure	Endoscopy Sessions	4 dedicated endoscopy sessions a week. (Additional sessions will be arranged based on performance)	Direct supervision	Journal club, didactic teaching sessions	Weekly 1-2 hours	Didactic, discussion	Multidisciplinary Obesity meeting	Fortnightly	Multidisciplinary discussion	Multidisciplinary tumour board meeting	Weekly 2 hour	Multidisciplinary discussion	Multidisciplinary Histology meeting	Monthly 1 hour	Multidisciplinary discussion
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8.1 Night Duties Requirement	<p>There are no night duties involved. The trainee will shadow and assist the supervising consultants during on-calls or when such a procedure is required to be performed after hours/public holidays. At all times the fellow would be required to work together with the supervising consultant.</p>
8.2 Running of Clinics Requirement	<p>Yes. The fellow will be assigned to run subspecialty clinics together with the supervising consultant and may be assigned to run general clinics during the General Gastroenterology component.</p>
<p>9. Assessment and Evaluation</p>	<p>Clinical Fellow will need to demonstrate their proficiency level based on the following competencies:</p> <ol style="list-style-type: none"> 1) Patient Care Manage patients' pre and post endoscopy with emphasis on pre procedure preparation and post procedure monitoring for complications. Perform endoscopy competently for the patients 2) Medical Knowledge Able to understand the indications and contraindications for the procedure Able to understand the disease and pathophysiology and how endoscopy will be able to help manage the disease process 3) Practice-Based Learning and Improvement Able to understand the role of endoscopy in management of patients 4) Interpersonal and Communication Skills Able to work well with nursing, medical staff in the endoscopy centre 5) Professionalism Be responsible for patients undergoing endoscopy To be collegial and be a good team player 6) Systems-Based Practice Understand the role of surgery, oncology, radiology and pathology in the multidisciplinary management of patients To be able to coordinate care between these subspecialties
9.1 Assessment approaches	<p>Formative assessment:</p> <ul style="list-style-type: none"> • Regular evaluation between Clinical Fellow and Supervisor / Head of Department • Reflective journal- logbook recordings of training activities <p>Summative assessment: Periodical assessment reports as required by Singapore Medical Council</p> <p>Feedback:</p> <ul style="list-style-type: none"> • End-of-training feedback form as required by Singapore Medical Council • End-of-training feedback session with SGH-PGMI

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<p>9.2 Evaluation Process 9.2.1 General overall grading system</p>	<p>The general overall grading system evaluates the Clinical Fellow's performance upon completion of the fellowship programme. All Clinical Fellow will be given a general overall grading status at the end of the fellowship programme based on the grading criteria requirements incorporating the six competencies based knowledge, skills and performance that Clinical Fellow must demonstrate throughout the programme.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #4F81BD; color: white;">Grading Status</th> <th style="background-color: #4F81BD; color: white;">Description</th> <th style="background-color: #4F81BD; color: white;">Grading Criteria Requirements</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">CMP</td> <td>Completes the programme</td> <td> <ul style="list-style-type: none"> Fulfils all training requirements in all 6 domains of evaluation with at least a satisfactory grading </td> </tr> <tr> <td style="text-align: center;">USP</td> <td>Unsatisfactory performance</td> <td> <ul style="list-style-type: none"> Fulfils only some training requirements in all 6 domains of evaluation with at least a satisfactory grading </td> </tr> <tr> <td style="text-align: center;">DCP</td> <td>Did not complete the programme</td> <td> <ul style="list-style-type: none"> Did not fulfil any training requirements in all 6 domains of evaluation with at least a satisfactory grading </td> </tr> <tr> <td style="text-align: center;">WDN</td> <td>Withdrawn from the programme</td> <td> <ul style="list-style-type: none"> Fellow withdraws from the programme or did not complete the required 12 months of fellowship training </td> </tr> </tbody> </table>	Grading Status	Description	Grading Criteria Requirements	CMP	Completes the programme	<ul style="list-style-type: none"> Fulfils all training requirements in all 6 domains of evaluation with at least a satisfactory grading 	USP	Unsatisfactory performance	<ul style="list-style-type: none"> Fulfils only some training requirements in all 6 domains of evaluation with at least a satisfactory grading 	DCP	Did not complete the programme	<ul style="list-style-type: none"> Did not fulfil any training requirements in all 6 domains of evaluation with at least a satisfactory grading 	WDN	Withdrawn from the programme	<ul style="list-style-type: none"> Fellow withdraws from the programme or did not complete the required 12 months of fellowship training
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<p>9.2.2 Options for Clinical Fellow who was graded with a (USP) for unsatisfactory performance</p>	<p>The programme does not have a provision to extend the training for more than 12 months for remedial training.</p>															
<p>9.3 Criteria for Early Termination</p>	<p>The attachment programme will be terminated early on the ground of the Clinical Fellow's poor performance, misdemeanour, misconduct, negligence or breach of any terms stipulated or referred to in the Fellowship Letter of Offer and Institution Terms and Conditions.</p> <p>The Clinical Fellow may also request to terminate the attachment programme for reasons such as serious illness or other personal obligations. The institution will review all requests for early termination with the Clinical Fellow and the Supervisor / Head of Department.</p>															

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10. Course Administration	Type of Certification: Certificate of Training Training Fee: S\$3,000 (before prevailing GST) per month Programme Funding source: Self-funded
11. Number of Clinical Fellow to be accepted at any one time	3