

**ORTHOPAEDIC SURGERY, SPORTS MEDICINE
FELLOWSHIP ATTACHMENT PROGRAMME IN SGH**

Components	Information
1. Division/ Department	Musculoskeletal Sciences/ Orthopaedic Surgery, Sports Service
2. Title of Programme	Clinical Fellowship Training in Orthopaedic Surgery, Sports Medicine
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	The Fellow will be trained in arthroscopy, reconstruction and arthroplasty surgical skills. The Fellow will assist the doctor in operations and is also encouraged to assist in seeing patients at the subsidised clinic sessions.
4.1 Background information	
4.2 Goal/ aim(s)	<ol style="list-style-type: none"> 1. To upgrade surgical skills. 2. To develop skills in evaluating and treating common orthopaedic sports injuries 3. To gain experience in performing, writing and publishing research. 4. To prepare and participate in weekly sports round and meetings. 5. To cultivate leadership skills necessary for future success in medicine.
4.3 Duration	6 months
4.4 Hyperlinks/URL Sites	https://www.sgh.com.sg/patient-care/specialties-services/orthopaedic-surgery/pages/sports-service.aspx
5. Target Audience	Applicants from ASEAN Countries like India and China, others are also welcomed to apply as long as they meet the eligibility criteria.
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 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> <p>In addition to the above criteria, Clinical Fellows must:</p> <ol style="list-style-type: none"> a) Have a minimum of 3 years working experience as a medical officer (or equivalent) b) Fulfil English Language requirements of SMC if the medium of instruction for the basic medical qualification is <u>not</u> in English c) Preferably have obtained a postgraduate diploma or medical degree in his country or overseas

**ORTHOPAEDIC SURGERY, SPORTS MEDICINE
FELLOWSHIP ATTACHMENT PROGRAMME IN SGH**

Components	Information
	<p>d) 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> <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 Fellows in this subspecialty): N.A.</p>
<p>6. Learning Objectives</p>	<p>This Clinical Fellowship programme would allow the Clinical Fellow to:</p> <ul style="list-style-type: none"> • Obtain a broad knowledge base of medical issues surrounding exercise and athletic competition. • Develop skills in evaluating and treating common orthopaedic injuries. • Experience team physician duties at many levels. • Become proficient in common orthopaedic procedures. • Examine and critically evaluate current orthopaedic and sports medicine literature. • Gain experience in performing, writing and publishing research. • Prepare and participate in half-yearly sports journal club meeting and alternate Wednesday sports round and attend various local Singapore Orthopaedic Association (SOA) Saturday meetings. • Obtain good knowledge of latest operation skills. • Cultivate leadership skills necessary for future success in medicine.
<p>7. Course/Training Syllabus</p>	<p>Type of Cases:</p> <ul style="list-style-type: none"> • Elbow Injuries • Knee Replacement • Rotator Cuff Tear • Foot and Ankle Sports Injuries • ACL Tear with Torn Meniscus <p>Type of Procedures:</p> <ul style="list-style-type: none"> • Knee Arthroscopic Examination • Arthroscopic Meniscal Surgery • Arthroscopic Anterior Cruciate Ligament Reconstruction • Shoulder Arthroscopy and Subacromial Decompression • Arthroscopic Rotator Cuff Repair • Arthroscopic Shoulder Stabilisation • Total Joint Replacement
<p>8. Training Method</p>	<p>Method of Supervision: Direct observation and feedback. Fellow will supervised by an assigned supervisor at all times.</p> <p>Observed Only: Fellow will have opportunities to observe the following procedures:</p>

**ORTHOPAEDIC SURGERY, SPORTS MEDICINE
FELLOWSHIP ATTACHMENT PROGRAMME IN SGH**

Components	Information												
	<ul style="list-style-type: none"> Multiple ligament reconstruction of the knee Complex shoulder reconstructions Total shoulder arthroplasty <p>Hands-On Experience: Fellow will perform or assist in the following procedures under supervision:</p> <ul style="list-style-type: none"> Knee arthroscopic examination Arthroscopic meniscal surgery Arthroscopic anterior cruciate ligament reconstructions Shoulder arthroscopy and subacromial decompression Arthroscopic rotator cuff repairs Arthroscopic shoulder stabilisations Total Joint replacements <p>No Job Rotation To Other Departments Within SGH and Other Institutions.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #D3D3D3;"> <th colspan="3">TRAINING ACTIVITIES & METHODOLOGY</th> </tr> <tr style="background-color: #D3D3D3;"> <th style="width: 40%;">Name of activity</th> <th style="width: 30%;">Frequency / No. of sessions / Length of session</th> <th style="width: 30%;">Teaching methodology</th> </tr> </thead> <tbody> <tr> <td>Pre-op Round (Department)</td> <td>Weekly: Every Monday (1 hour)</td> <td>Presentation of a few interesting / complicating cases for discussion between Junior and Senior Surgeons.</td> </tr> <tr> <td>Mortality & Morbidity Rounds</td> <td>Weekly: Every Thursday (1 hour)</td> <td>A teaching round to review death that occurs in the department and provide an invaluable forum for 'cross talk' between disciplines, and facilitate the coalescence of cumulative learning and experiences. The aim is to maintain and improve the quality of patient care, by enabling Physicians and Colleagues to acknowledge adverse events /medical errors that result in morbidity or mortality.</td> </tr> </tbody> </table>	TRAINING ACTIVITIES & METHODOLOGY			Name of activity	Frequency / No. of sessions / Length of session	Teaching methodology	Pre-op Round (Department)	Weekly: Every Monday (1 hour)	Presentation of a few interesting / complicating cases for discussion between Junior and Senior Surgeons.	Mortality & Morbidity Rounds	Weekly: Every Thursday (1 hour)	A teaching round to review death that occurs in the department and provide an invaluable forum for 'cross talk' between disciplines, and facilitate the coalescence of cumulative learning and experiences. The aim is to maintain and improve the quality of patient care, by enabling Physicians and Colleagues to acknowledge adverse events /medical errors that result in morbidity or mortality.
TRAINING ACTIVITIES & METHODOLOGY													
Name of activity	Frequency / No. of sessions / Length of session	Teaching methodology											
Pre-op Round (Department)	Weekly: Every Monday (1 hour)	Presentation of a few interesting / complicating cases for discussion between Junior and Senior Surgeons.											
Mortality & Morbidity Rounds	Weekly: Every Thursday (1 hour)	A teaching round to review death that occurs in the department and provide an invaluable forum for 'cross talk' between disciplines, and facilitate the coalescence of cumulative learning and experiences. The aim is to maintain and improve the quality of patient care, by enabling Physicians and Colleagues to acknowledge adverse events /medical errors that result in morbidity or mortality.											

**ORTHOPAEDIC SURGERY, SPORTS MEDICINE
FELLOWSHIP ATTACHMENT PROGRAMME IN SGH**

Components	Information		
	Sports Round	Alternate Wednesday (1 hour)	Invite Specialist from different hospitals to give lecture/discussion and educate on various interesting topics to all Doctors, Fellows and Nurses.
	Department Journal Club	Monthly or Twice monthly evening meeting	Hosted by Senior Consultant or Director to allow the Junior Doctors and Fellows to present cases and have an open discussion and a Q&A sessions at the end of the meeting.
	Sports Workshop	Conduct six monthly, consists of a half day/one day session	Cadaveric course & practical saw bone sessions for Fellows.
	Clinics	Once per week	Initial evaluations and communicate with the patient. Taking of accurate notes and make diagnosis and management of joint problems and sports injuries. All done under close supervision of a Senior Consultant/Supervisor.
9. Assessment and Evaluation	<p>Fellows will need to demonstrate their proficiency level based on the following competencies:</p> <p>1) Patient Care</p> <ul style="list-style-type: none"> • Become highly proficient in the evaluation and treatment of patients with sports injuries in the clinic including application of physical examination tests specific to the diagnosis. • Become highly proficient in the evaluation and treatment of injured athletes both on the field and in the training room. 		

**ORTHOPAEDIC SURGERY, SPORTS MEDICINE
FELLOWSHIP ATTACHMENT PROGRAMME IN SGH**

Components	Information
	<ul style="list-style-type: none"> • Be able to examine the injured extremity with a high level of sophistication and detail to determine any bony or ligamentous injury, tendon injury, nerve injury, or arterial injury of the extremity. • Be able to perform a detailed clinical examination of the shoulder, elbow, knee and ankle. • Be able to order appropriate diagnostic tests and imaging studies to assist with diagnosis and accurate assessment of the level/severity of the injury. • Be able to interpret diagnostic test and imaging studies (X-rays, CT scan, and MRI) to assist with diagnosis and accurate assessment of the level/severity. <p>2) Medical Knowledge</p> <ul style="list-style-type: none"> • Develop a sophisticated understanding of the anatomy of the shoulder, elbow, knee, and ankle including the bones, ligaments, tendons, nerves and arteries. • Have a sophisticated understanding of soft-tissue behavior including the effects of immobilisation and exercise. • Have a thorough understanding of ligament repair and graft incorporation should be developed, including the normal time course for regeneration of strength in an ACL graft, as well as knowledge of graft forces with various activities. • Attend the orthopaedic sports journal club that focuses on sports medicine, hosted once or twice a month. • Attend sports round meeting and involved in presentations and discussions of cases. <p>3) Practice-Based Learning and Improvement</p> <ul style="list-style-type: none"> • Frequent, yet focused, use of available printed textbooks (in the orthopaedic library), online textbooks, and Medline sources for application to specific patients. The goal is to demonstrate the ability to locate and interpret scientific studies and known medical knowledge into an appropriate knowledge base that will be of direct benefit to patients. • Frequent discussion with sports medicine fellows and attending sports round meeting to present patients after initial evaluation, review available diagnostic tests, and to confirm the appropriate treatment plan. The Fellow will be expected to formulate a plan of treatment, which will then be reviewed in detail and either confirmed or altered as necessary to achieve optimal patient outcome. • Use of appropriate sources (e.g. textbook, selected articles from the literature, etc.) to obtain more detailed information about a specific patient or diagnosis, based on his/her experiences on the sports medicine service. • Demonstrate expertise in use of available information technology and hospital information systems to manage patient data (e.g. laboratory tests, imaging tests, etc.) and access online information that will be of direct benefit to his/her own education. • Participate in project and publication.

**ORTHOPAEDIC SURGERY, SPORTS MEDICINE
FELLOWSHIP ATTACHMENT PROGRAMME IN SGH**

Components	Information
	<p>4) Interpersonal and Communication Skills</p> <ul style="list-style-type: none"> • Demonstrate ability to communicate effectively with all members of the sports medicine service, including medical students, junior residents, senior residents, and sports medicine surgery attending staff. • Demonstrate ability to communicate effectively and work well with all members of the hospital staff, including nurses, nursing assistants, radiology staff, social workers, discharge planners, physical therapists, hand therapists, operating room/surgery center staff, inpatient/outpatient support staff, etc. • Demonstrate effective listening and communication skills with patients, which may include both verbal and non-verbal skills. • Demonstrate ability to understand and respond appropriately to patient inquiries. <p>5) Professionalism</p> <ul style="list-style-type: none"> • Demonstrate a strict adherence to medical/ethical principles. • Demonstrate a keen sensitivity to the differences and challenges that a diverse patient population may present, especially in the context of the known multi-racial and multi-cultural patient population. • Treat all patients with respect, empathy, and with compassionate care. All patient inquiries and requests will be considered seriously, professionally, and in a timely manner. • Recognise the important social, economic, emotional, and work-related implications that a sports medicine problem or injury may represent for the patient. • Provide patients with excellent care in all aspects. • Maintain patient confidentiality, including strict adherence to Ministry of Health Singapore guidelines. • Obtain informed consent from patients in accordance with established guidelines that ensure full patient comprehension after a detailed discussion of all pertinent issues relating to patient care/surgery. This includes the opportunity for the patient to ask and have answered questions relating to any proposed procedures. • Demonstrate the ability to accommodate and adapt to differences in patients' culture, age, gender and disabilities. <p>6) Systems-Based Practice</p> <ul style="list-style-type: none"> • Demonstrate an ability to effectively utilise hospital resources in a way that directly benefits patient care. • Develop a more in-depth understanding of the different types of medical practice available in the context of orthopaedic sports medicine surgery. • Develop a mature understanding of the necessity to provide efficient and cost-effective health care in the context of appropriate use of limited medical resources, yet without sacrificing quality of care.
9.1 Assessment approaches	<p>Formative assessment:</p> <ul style="list-style-type: none"> • Regular evaluation between Fellow and Supervisor / Head of Department • Reflective journal- logbook recordings of training activities <p>Summative assessment:</p>

**ORTHOPAEDIC SURGERY, SPORTS MEDICINE
FELLOWSHIP ATTACHMENT PROGRAMME IN SGH**

Components	Information															
	<p>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 															
<p>9.2 Evaluation Process</p> <p>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="background-color: #D9E1F2;">CMP</td> <td style="background-color: #D9E1F2;">Completes the programme</td> <td style="background-color: #D9E1F2;"> <ul style="list-style-type: none"> • At least 90% attendance for all meetings and training activities. • Active participation in most training activities. </td> </tr> <tr> <td style="background-color: #D9E1F2;">USP</td> <td style="background-color: #D9E1F2;">Unsatisfactory performance</td> <td style="background-color: #D9E1F2;"> <ul style="list-style-type: none"> • Less than 30% attendance for all meetings and training activities. • Consistently demonstrates poor training skills and patient care. • Demonstrates no respect towards Supervisor or other Health Professionals' advice. • Lack of responsibility throughout the programme and lack of interest to learn. </td> </tr> <tr> <td style="background-color: #D9E1F2;">DCP</td> <td style="background-color: #D9E1F2;">Did not complete the programme</td> <td style="background-color: #D9E1F2;"> <ul style="list-style-type: none"> • Does not attend any meeting or attend any training activities. • No supporting documents for absence or valid reason for not completing the programme (e.g. medical certificate / hospitalisation leave). </td> </tr> <tr> <td style="background-color: #D9E1F2;">WDN</td> <td style="background-color: #D9E1F2;">Withdrawn from the programme</td> <td style="background-color: #D9E1F2;"> <ul style="list-style-type: none"> • Absolutely nil participation in the programme. </td> </tr> </tbody> </table>	Grading Status	Description	Grading Criteria Requirements	CMP	Completes the programme	<ul style="list-style-type: none"> • At least 90% attendance for all meetings and training activities. • Active participation in most training activities. 	USP	Unsatisfactory performance	<ul style="list-style-type: none"> • Less than 30% attendance for all meetings and training activities. • Consistently demonstrates poor training skills and patient care. • Demonstrates no respect towards Supervisor or other Health Professionals' advice. • Lack of responsibility throughout the programme and lack of interest to learn. 	DCP	Did not complete the programme	<ul style="list-style-type: none"> • Does not attend any meeting or attend any training activities. • No supporting documents for absence or valid reason for not completing the programme (e.g. medical certificate / hospitalisation leave). 	WDN	Withdrawn from the programme	<ul style="list-style-type: none"> • Absolutely nil participation in the programme.
Grading Status	Description	Grading Criteria Requirements														
CMP	Completes the programme	<ul style="list-style-type: none"> • At least 90% attendance for all meetings and training activities. • Active participation in most training activities. 														
USP	Unsatisfactory performance	<ul style="list-style-type: none"> • Less than 30% attendance for all meetings and training activities. • Consistently demonstrates poor training skills and patient care. • Demonstrates no respect towards Supervisor or other Health Professionals' advice. • Lack of responsibility throughout the programme and lack of interest to learn. 														
DCP	Did not complete the programme	<ul style="list-style-type: none"> • Does not attend any meeting or attend any training activities. • No supporting documents for absence or valid reason for not completing the programme (e.g. medical certificate / hospitalisation leave). 														
WDN	Withdrawn from the programme	<ul style="list-style-type: none"> • Absolutely nil participation in the programme. 														
<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 Clinical 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.</p> <p>The institution will review all requests for early termination with the Clinical Fellow and the Supervisor / Head of Department.</p>															

**ORTHOPAEDIC SURGERY, SPORTS MEDICINE
FELLOWSHIP ATTACHMENT PROGRAMME IN SGH**

Components	Information
10. Course Administration	Type of Certification: Certificate of Training Training Fee: S\$3,210 per month Programme funding source: Self-funded
11. Number of Clinical Fellow to be accepted at any one time	5