PLASTIC SURGERY RESIDENCY

TRAINING REQUIREMENTS

(A) INTRODUCTION

Plastic Surgery has a wide scope including Reconstructive Microsurgery, Cleft and Craniofacial Surgery, the Management of Burns, Hand Surgery and all aspects of Aesthetic Surgery. The list is not exhaustive and not limited by anatomy.

(B) PROGRAMME OVERVIEW

The programme consists of 2 parts. The initial 2 years of training will be Surgery-in-General. (Please refer to on Training Guide for Surgery-in General). During this period, Residents will rotate through postings in General Surgery, Anaesthesiology, Accident & Emergency, Orthopaedic Surgery and other related specialities deemed suitable and relevant.

The second period of 4 years would be spent in core-training in Plastic Surgery. During this period, the Resident would spend 3-6 monthly rotations mainly in Plastic Surgery Departments, but may also spend pre-approved time in the Departments of Neurosurgery, Hand Surgery, ENT and Oncologic Surgery.

The Resident would be exposed to the full spectrum of Plastic Surgery and would be actively participating in research and teaching.

(C) ADMISSION REQUIREMENTS

A basic medical qualification, MBBS, MBBch or MD and completion of internship/housemanship is required before commencement of Residency. However, a candidate may be selected prior to the completion of internship.

Satisfactory completion of SIG Residency and the passing of the MRCS are requirements before a Resident is allowed to progress to R3 and core-training in Plastic Surgery.

(D) TRAINING REQUIREMENTS

The first 2 years are dedicated to SIG Residency (please refer to the Training Guide for Surgery in General). The Resident must pass the MRCS before progression to R3.

- **Postings**
  Residents will be rotated through Plastic Surgery Units accredited for training, for periods of 3-6 months, or longer for their core training.

  Elective periods of 3-6 months may be spent in Neurosurgery, Hand Surgery, ENT, Urology and Surgical Oncology. The Resident is encouraged to spend up to 6 months in elective rotations.

- **Clinical and Operative Experience**

  The Resident will participate in Clinics, Ward Care and Surgery. This would include exposure to patients with and requiring care for:

  1. Burns - including acute management, resuscitation, respiratory burns and late reconstruction.

  2. Reconstructive Microsurgery - including the raising of flaps, microsurgery and flap monitoring and revisional surgery.

  3. Cleft Lip and Palate surgery - including genetics, speech therapy and orthodontic management.

  4. Craniofacial Surgery - including the management of congenital deformities, tumours, trauma and orthognathic surgery.

  5. Hand Surgery - including trauma and the management of congenital hand deformities.

  6. Skin Lesions, Skin Grafting and Flaps.

  7. Congenital Deformities

  8. Aesthetic Surgery - including surgery to the face, breasts, trunk and extremities.

     - including the use of chemical peels, fillers, threads implants and hair transplantation.

  9. Lasers - including radiofrequency devices and ultrasound.

  10. Trauma - including the acute management and the late management of complications and sequalae of trauma.

  11. Breast - including reconstruction and aesthetic breast surgery.

- **Didactic , Assignments, Research and Teaching**

  Residents will participate in regularly scheduled:

  1. Morbidity and Mortality conferences
  2. Journal Clubs
  3. 6 monthly Resident Training Days *(i.e. Monthly AST Teaching Sessions)*
  4. 2-monthly Research Meetings
  5. Grand Ward Rounds
  6. Burns Rounds

  Residents will be assigned topics for presentations, analysis, clinical and basic research through their period of training.

  Residents will be expected to teach and lecture to junior Residents, Nursing personnel and paraclinical staff.

- **Other Training Requirements**

  Residents must pass the MRCS during the SIG Residency at the end of R2.

  Residents are expected to publish research papers during the 6 years training period, and to make presentations at conferences.

  Progression in the Residency depends on satisfying the requirements at each stage and satisfactory supervisor reports.

- **Resident Proficiencies in the Care Competencies**

  1. **Patient Care**
     The resident will provide patient care that is compassionate, appropriate and effective for the treatment of the problem.

     He will correctly diagnose the condition, evaluate the problem and prescribe the best treatment effectively and judiciously.

  2. **Medical Knowledge**
     The Resident will demonstrate detailed and up to date knowledge of established and evolving management methods in Plastic Surgery. He will be aware of controversies and limitations in the different techniques applied. He will know the complications and seek to avoid them.

  3. **Practice-based Learning and Improvement**
     The Resident will evaluate our patient-care practices and will be able to appraise, assimilate and improve on these practices. He will identify strengths and limits, perform appropriate activities, analyse situations, incorporate evaluation feedback and set learning and improvement goals. He will also make use of information technology to aid him

  4. **Interpersonal and Communication Skills**
     The Resident will be able to inform and educate the patient and his family about his condition, treatment strategies and rehabilitation plans. He will provide adequate counselling and informed consent. He will be a sympathetic listener and demonstrate compassion.

     With his colleagues he will be an effective communicator and a responsible team player. He will be valuable and timely in his contributions.

  5. **Professionalism**
     The Resident will demonstrate a high level of integrity compassion and ethical behaviour. He is sensitive to the stresses of the infirmed and responsive to their needs. He respects their privacy and autonomy. He is reliable, accessible and exhibits high moral values.

6. **Systems-based Practice**

The Resident will be aware he is functioning in the larger context of our health-care system. He is able to work in various delivery systems and provide optimal care. He is part of multi-disciplinary teams and is able to coordinate care effectively. He is cognicent of cost considerations and risk benefit issues.

7. **Faculty Development**

All Residents are viewed as future educators and there is an expectation that some, if not many, will continue in this role after their exit.

(E) SUPERVISION AND WORK HOURS OF RESIDENTS

I. Supervision

All residents will be supervised by a designated supervisor. The ratio of all teaching faculty to residents should be 1:1. The number of core clinical faculty to resident ratio must be no less than 1:6 for surgical subspecialties and no less than 1:2 for internal medicine-related subspecialties. 20% of resident's time must be protected for training.

II. Work Hours

Work hours can be defined as all clinical and academic activities related to residency training. Work hours must be limited to 80 hours per week, averaged over a month, including all on-calls. Residents must be allowed 1 day (i.e. 24 continuous hours) in 7 days free from all clinical administrative and academic responsibilities, averaged over a month. Adequate time for rest and personal activities must be provided. This should consist of a 10-hour time period provided between all daily duty periods and after in-house call.

In-house call must occur no more frequently than every third night, averaged over a four-week period. No new patients may be seen after 24 hours of continuous duty. Continuous on-site duty, including in-house call, must not exceed 24 consecutive hours. Residents may continue to be on duty for up to six additional hours to participate in didactic activities, transfer care of patients, conduct outpatient clinics, and maintain continuity of medical and surgical care.

Work hours must be reported in the designation system (e.g. New Innovations) and tracked by the Programme Director.

(F) ASSESSMENT AND EXAMINATIONS

I. Log of operative / clinical experience

All residents must keep a log of their operative cases in the log-book given to them. This must be submitted for evaluation after every posting.

II. Assessment

The supervisor's evaluation must be performed and submitted at the end of every rotation/posting in the designated form and submitted to the RAC for review together with the log-book.

III. Feedback

Residents are to perform a yearly evaluation of the teaching faculty and the training programme and the designated form submitted to the RAC and kept absolutely confidential.

IV. Examinations

Residents should pass the following specific examination before next residency progression and upon exit.

R1	*R2*	*R3*	*R4*	*R5*	*R6*
NA	*MRCS*	*Successful completion of enhancements of Workplace-Based Assessments (WBA) (see below)*	*NA*	*NA*	*Plastic Surgery Exit Examination*

Enhancements of Workplace-Based Assessments (WBA)
• Resident Competency Evaluation: To score at least an average of 6 out of 9 (based on 9-point scale) • Positive 360 Evaluation: To score at least an average of 3 out of 5 (based on 5-point scale) • Meet the SDOPS requirement for promotion, i.e., submit at least 2 SDOPS per posting and each SDOP to achieve minimum score of Level 3 (i.e. able to perform procedure with minimal supervision) under 'Global assessment' (Please refer to Annex E for the Directly Observed Procedural Skills (DOPS) form)[1] • Meet the Mini-CEX requirement, i.e., submit 2 Mini-CEX per posting (Please refer Annex F for the Mini Clinical Evaluation Exercise (CEX) form)[2] • Pass the annual in-service examination with the achievement of the following minimal scores: 60% for R3, 65% for R4, 70% for R5 and 75% for R6***** • Attendance of at least 75% of all dedicated teaching sessions • Submission of completed and updated case logs[3]

[1] A table of procedures of increasing complexity for the 4 years is made known to the residents at the start of their residency. The specific SDOPs can be chosen from those procedures for that Residency year but will not be exhaustive for all procedures in the list. The rating domains/range are: N not applicable/not observed; 1 (poor), 2, 3 (Satisfactory), 4 and 5 (superior). One SDOPs will be assessed by a single assessor, however, subsequent SDOPs can be performed with other assessors. The residents will be rotated among the different institutions.

[2] The cases and settings chosen for Mini-CEX are agreed upon by the resident and assessor and are not prescribed by the program. The rating scale ranges from 1 to 9 with scores 4-6 being satisfactory, lower scores being unsatisfactory and higher ones being above expectation. Each Mini-CEX is assessed by a single assessor. The PDs/APDs are currently working on expanding and standardising the type of mini-CEX.

[3] The log is a record of the individual operative cases that the residents are involved in with the diagnoses of the conditions and the role the residents played in those surgeries e.g., First or second surgeon or assistant. It is therefore a record of exposures to the range of conditions and the various roles the resident played in them but not the quality of performance, which would be assessed in SDOPS.

Plastic Surgery Exit Examination Format

Written Examination

a. MCQs - 140 total (single-best response)
   Total duration: 3hours

b. MCQs - 140 total (single-best response)
   Total duration: 3hours

The pass mark for the Written Examination will be determined after standard setting for each exam.

Clinical Examination

a. Viva 1 (Total duration 1 hour, inclusive of 15 minutes of reading time)
   - 2 examiners marking independently
   - 6 clinical scenarios

b. Viva 2 (Total duration 1 hour, inclusive of 15 minutes of reading time)
   - another 2 examiners marking independently
   - another 6 clinical scenarios

The exit examination with the new format will start from year 2025.

Written Examination

a. MCQs - 120 total (single-best response)
   Total duration: 2.5 hours

b. MCQs - 120 total (single-best response)
   Total duration: 2.5 hours

The pass mark for the Written Examination will be determined after standard setting for each exam.

Clinical Examination

a. Viva (Total duration 1 hour, inclusive of 15 minutes of reading time and 45 minutes examination)
   - 2 examiners marking independently
   - 6 clinical scenarios

b. Patient-facing: 1 long case (30 minutes) and 3 short cases (20 minutes) (Total duration: 50 minutes)
   - 2 examiners marking independently

Eligibility criteria

1. The Plastic Surgery Exit Examination will be conducted once a year, at a date no further than three months prior to their end of residency training date.

2. Residents must be 3 months or less from completion of residency, taking into account sick leave, maternity leave, study leave.

3. Eligibility to sit for the Plastic Surgery Exit Examination will be determined by Examination Committee in consultation with the RAC Chairman and Programme Director, based on the following:

    - A logbook review indicating that the candidate has satisfactorily completed the learning activities needed to achieve competency approved by RAC, and
    - Fulfilled the monthly AST or equivalent teaching session and satisfied the assessment criteria, and
    - Fulfilled all the Exit Examination requirements stipulated in the Exit Examination Application form

Resits

Candidates who fail this examination may re-sit the next examination in the following year.

Candidates must pass Plastic Surgery Exit Examination before they are allowed to exit from the Residency Programme.

(G) CHANGES IN TRAINEESHIP PERIOD AND LEAVE OF ABSENCE

I. Changes in Training Period

Residency should be continuous. If a training programme is interrupted for any reason whatsoever, the RAC may at its discretion, require the resident to undergo a further period of training in addition to the minimum requirements of the programme or terminate the residency altogether. All residents are required to conform to the residency training plan as approved by the RAC and complete all the exit and training requirements within the maximum candidature.

II. Leave Of Absence

All residents are to comply with the prevailing MOH policy on Leave of Absence.

III. Overseas Postings

Overseas attachment during Senior Residency training is not permitted with the exception of Radiation Oncology and Neurosurgery (*refer to JCST Circular 114/14*).