1. Plastic Surgery Rotation - HHS: Rotation Specific Objectives & Orientation Document

1.1 General Objectives for All Residents

**Communicator:** Timely completion of consults, progress and procedure notes to facilitate communication with referring physicians and other members of the health care team. Concise and accurate case presentations either in person by telephone to senior colleagues (staff or other residents), patient education and counseling.

**Collaborator:** Initiate, coordinate and correlate the management of surgical patients with physicians from other services (e.g. Infectious diseases, internal medicine) and with allied health professionals (e.g. OT/PT, nutrition).

**Manager:** Wisely manage of health care resources with cost-effective bed management strategies to provide optimal care to the surgical patient. Daily rounds and progress notes prepared for all inpatients.

**Health Advocate:** Counsel patients and families on healthy lifestyle choices to maintain health or avoid deterioration of health.

**Scholar:** Review surgical journals and other medical and surgical sources of information regarding diagnostic and therapeutic guidelines. Participate in the education of medical students and paramedical personnel. Participate in research activity to advance our field.

**Professional:** Professional interaction with health care personnel in the Emergency department, Short Stay Unit, in hospital wards should include good communication skills as well as treating all patients in an ethical manner.

1.2 Objectives for Junior Plastic Surgery Residents (PGY1 and 2), Off-service Residents (General Surgery, Orthopedic Surgery, Emergency Medicine, Family Medicine, other programs)

Some topics will be more applicable to some specialties than to others (e.g. Orthopaedic Surgery residents need to focus more on hand injuries and bone healing while General Surgery residents need to know more about principles and techniques of breast reconstruction, wound healing and abdominal reconstruction techniques).

Greater proficiency at technical skills is expected of residents in surgical programs (and Emergency Medicine) than in other programs.

A) KNOWLEDGE
General
Wound healing Bone healing Tendon healing Nerve healing Anatomy - skin, hand, breast
Physical examination - hand

Specific
Hand Fingertip injuries Extensor tendon lacerations Flexor tendon lacerations Fractures and dislocations Infections Common "tumours" (ganglia, giant cell tumours) Common inflammatory conditions (stenosing tenosynovitis, DeQuervain's tenosynovitis) Compression neuropathies (carpal tunnel syndrome, cubital tunnel syndrome) Skin Skin grafts Basic skin flaps Malignancies (basal cell carcinoma, squamous cell carcinoma, melanoma) Common benign lesions Ulcer management Frost Bite Tissue Viability; Tissue viability assessment Burns Resuscitation/ABA (American Burn Association) Criteria for admission Electrical/Chemical/Thermal/Inhalational Appropriate wound care for same including specific anatomic sites Breast Breast reduction Breast cancer and postmastectomy reconstruction (principles, techniques)

B) TECHNICAL SKILLS
Hand Repair of fingertip injuries Repair of extensor tendon lacerations Closed reduction and appropriate splinting of simple fractures and dislocations Incision and drainage of simple hand infections Minor hand surgeries (trigger finger releases, carpal tunnel releases)

Skin Harvesting skin grafts (split thickness, full thickness) Excision of lesions Debridement of ulcers, burns Escharotomies

1.3 Senior Plastic Surgery Residents (PGY3, PGY4 and PGY5)

Residents should have a thorough grasp of all the basic knowledge and technical skills listed above plus the objectives outlined below. Residency training (and beyond) is a continuum of learning and not a series of quantum leaps from year to year. Generally speaking however, execution of more difficult cases is not expected until the more senior years (PGY4, PGY5, fellow).

A) KNOWLEDGE
Hand Principles of microsurgery and replantation Dupuytren's disease Tumours (soft tissue, bone) Compression neuropathies (all) Tendon transfers Rheumatoid hand Osteoarthritis Injection injuries Reflex sympathetic dystrophy Upper extremity reconstruction

Flaps Skin flaps (all) Fasciocutaneous flaps Myocutaneous flaps Osteocutaneous flaps Free flaps
Breast Gynecomastia Aesthetic breast surgery (augmentation, mastopexy)
Head & Neck All topics covered in Head & Neck rotation (lump in the neck, premalignant and malignant disease, mandibular tumours/cysts, salivary gland tumours)
Flaps in the head and neck Mandibular reconstruction Eyelid reconstruction Lip reconstruction Cheek reconstruction Ear reconstruction Facial nerve palsy
Aesthetic Abdominoplasty Liposuction Facelift Blepharoplasty Browlift
Pediatric Congenital Hand Craniofacial Clefts Ear Deformities Vascular Anomalies
Other Facial fractures Trunk and lower extremity reconstruction

B) TECHNICAL SKILLS
Hand Repair of flexor tendon lacerations Microsurgical repair of nerves, vessels
Replantations Open reduction and internal fixation of fractures/dislocations Excision of Dupuytren's disease Nerve decompression Tendon transfers
Arthroplasties
Flaps Skin flaps Fasciocutaneous flaps Myocutaneous flaps Osteocutaneous flaps Free flaps

Breast Breast reduction Excision of gynecomastia Breast augmentation Mastopexy Breast reconstruction (tissue expanders, TRAM flaps)

Head & Neck Local flaps Free flap reconstruction Reconstruction of specialized parts (eyelids, lips, ears) Facial nerve grafting

Aesthetic Abdominoplasty Liposuction Facelift Blepharoplasty Browlift
Other Facial fractures Trunk and lower extremity reconstruction Congenital ear deformities

2. Orientation to the HHS Plastic Surgery Service

2.1 Service
The Plastic Surgery service at the Hamilton General Site is located at the Burns and Trauma Unit on the 3rd floor (4Y and 3B & C at MUMC). The service is composed of several tiers: Clinical clerks, off-service residents, plastics residents (junior/senior), plastic surgeons.

There are six (6) staff surgeons at HHS. The Hamilton General service is usually divided into two separate teams. Please see the attached schedules, and discuss this with the senior plastics resident. The teams have be divided into Bain/Martin and Dal Cin/Heddle/Strumas. This approach works well for all members of the team. Each resident will be expected to actively participate in his or her own education by following the schedule. There is always something to do, but rarely a direct invitation.
Each resident should attend OR's, clinic (in addition to the residents' clinic) or office and the minor procedure room (SSU) each week. The onus is on the resident to attend scheduled activities, all of which will reflect on your evaluation. What you get from a rotation is proportional to what you put into it.

Since the HHS surgeons cover all three sites (plus Chedoke Hospital), this document should serve for the two main sites - Hamilton General Site and MUMC. The differences will be obvious. The Hamilton General Site residents will also cover OR's at the Henderson Site when appropriate.

2.2 Coverage

Throughout the day there is an emergency coverage call schedule from 0800h to 1700h. The senior resident will determine this. Cases in emergency are to be discussed with the staff surgeon on call and the senior resident if possible.

All admissions and in-hospital consultations must be discussed with the senior resident and the resident who will be covering call.

Notes must be dictated for all consultations and procedures. A copy must be dictated to the on-call staff, the GP, WSIB, (when appropriate).

Discharge summaries are to be dictated by the residents for patients who have been admitted longer than 7 days.

Communication is the key to a well-run service. Residents on call in the evening and during the day are to sign over to the on-coming resident, and/or senior resident. This should occur before 0800h on the weekdays and 0900h on the weekends. If there is a case on the emergency board for the operating room that will likely go to the OR after 5pm or on the weekend, the resident must sign out to the on-call resident so they are aware that there is a case pending. The resident who admitted the patient has the opportunity to come back for the case if they choose even if they are not on call. During weekend call if there are ORs starting at 0800h you must let the on-coming resident know in advance about the OR so they can be in hospital before 0900h.

A plastic resident call room on 3 North Upper is available if necessary when on call at night. The key is located on the BTU.

When leaving the service you are expected to write hand over summaries on your patients. And at the end of the day, communicate with the on-call resident about any in-patients with active concerns or patients waiting in the ER.

2.3 Rounds
Rounds will commence promptly at 0700h Monday, Tuesday, Thursday, and Friday. On Wednesday rounds will start at 0630h because of academic half days in the morning. Off service residents are expected to return to their clinical duties by 1200h on Wednesdays.

Residents are expected to round on the active patients and acutely sick patients, and write notes, when on call on the weekends. It is important to start rounds early enough on weekends to facilitate discharges. If there is an OR at 09:00 hrs on a weekend, the am rounds should be completed before you go the OR at 09:00 hrs.

All burn / micro / flap patients require progress notes daily, and assessment several times throughout the day. It is a good habit to round on your sick patients before leaving at the end-of the day, and sign over active issues to the on-call resident.

Stable ulcer / wound patients should be assessed at least once per week, along with a progress note.

2.4 Burns
Burn admissions can be extremely sick and require very diligent care. Off-service residents may make arrangements with the plastic residents for added coverage when on call at night if a very sick burn is admitted. There is a burn admission information sheet in a binder on the chart rack in BTU.

Burn rounds are held on the BTU at 1530 hrs on Tuesdays and are mandatory for all residents to attend.

2.5 Clinics
There is a resident clinic on Friday afternoons starting at 1300h. This is mandatory for all residents. The staff surgeon on call during the weekend covers this clinic. Follow-up appointments for this clinic are to be booked by patients in advance -otherwise they arrive without a chart or x-rays.

The patient is to call the morning after assessment/injury and book an appointment for the given Friday. The number is 527-4322 ext 46266. Business cards are available at the clinic (main floor OPD section C) and the emergency room. The wound clinic on Thursday mornings is very useful and must be attended by each resident at least once per month. It is located in the OPD section C and is run by Dr. S. Landis and Dr. N. Flett. The multidisciplinary Cutaneous Malignancy Clinic is held at the Hamilton Regional Cancer Clinic on Tuesday afternoons with Dr. Dal Cin acting as the Plastic Surgery Consultant. Her resident should attend these clinics weekly and which is an excellent educational opportunity.

2.6 Hand Therapy
Follow-up in the Hand therapy clinic (main floor HGH) requires several steps:
1. A detailed note of the time of injury, treatment, details of the treatment (location of k-wires, type of tendon repair) and the splint-protocol requested needs to be completed and given to the patient to take with them to the clinic. This can be done on a prescription.
2. The Hand therapy clinic should be sent a copy of the dictated note.
3. The clinic must be called in advance by the physician making the referral to let them know about the referral so they can make appropriate schedule allocations. The number is 527-4322 ext 46297.

2.7 ORs

Residents are expected to know the patient histories on whom they will be operating. This means arriving in the OR / patient holding in advance to read the chart / examine the patient. Preparation for cases in advance means a greater chance of operating. It is the resident's responsibility to make sure that pre-operative orders and consents are written. ORs start promptly at 0800h. Rounds should be finished to allow for this start time. This may require commencing rounds on your patients before 0700/0630h.

Each surgeon operates in the main OR, and in a Short Stay Unit (SSU). Schedule your time to allow exposure to both. Some surgeons operate at the Henderson / MUMC. You must call and determine what cases if any are scheduled and make appropriate arrangements with the senior resident.

2.8 Schedule

1. MUMC clinics (Bain, Strumas) and MUMC OR's are covered by the MUMC resident but the Hamilton General Clinics are covered by the resident on the Bain /Martin team when possible.
2. Surgeries at the Henderson are covered by the resident for the particular surgeon who is operating, (see below)
3. The weekly schedule has some variability since the surgeons cover three sites, so it is necessary to review this schedule to be familiar with the subtleties.

Surgeon Monday Tuesday Wednesday Thursday Friday Dr. Dal Cin am pm OR (Hend all day) OR (Hend) Cancer Clinic SSU (HGH all day) OR (HGH all day 1st and 3rd weeks) Office Dr. Bain am pm OR (HGH all day) SSU (MUMC) Peds Clinic (MUMC) Clinic (MUMC all day) OR (MUMC all day 2nd & 4th weeks) Clinic (HGH) Dr. Martin am pm Office all day OR (HGH all day) Office all day OR (Hend all day 1st & 3rd weeks) SSU (HGH all day 2nd & 4th weeks SSU (HGH all day 1st & 3rd weeks) Dr. Heddle am pm Office all day Office all day OR (HGH all day) OR (Hend all day 2nd & 4th weeks) SSU (HGH all day 1st & 3rd weeks) SSU (HGH all day 2™ & 4th weeks) Dr.Strumas OR (MUMC all day) Clinic (MUMC pm)

2.9 Surgeons Contact Information
3. Plastic Surgery Rotations at St. Joseph's Healthcare: Rotation Specific Objectives

3.1 General Objectives for All Residents

Communicator - Timely completion of consults, progress notes, and procedure notes to facilitate communication with referring physicians and other members of the health care team. Concise and accurate case presentations either in person or by telephone to senior colleagues (staff or other residents). Patient education and counseling.

Collaborator - Initiation and coordination of patient management with physicians from other services (e.g. infectious diseases, internal medicine) and with allied health professionals (e.g. OT/PT, nutrition).

Manager - Wise management of health care resources with cost-effective bed management strategies to provide optimal care to the surgical patient. Daily rounds and progress notes on all inpatients.

Health Advocate - Counseling of patients and families on healthy lifestyle choices to maintain health or avoid deterioration of health.

Scholar - Reviewing surgical journals and other medical and surgical sources of information regarding diagnostic and therapeutic guidelines. Participation in the education of medical students and paramedical personnel. Participate in research activity to advance our field.

Professional - Professional and ethical interaction with patients, families, and health care personnel in the Emergency Department, Short Stay Unit, OR and hospital wards.

3.2 Objectives for Junior Plastic Surgery Residents (PGY1 and PGY2) and Off-service Residents (General
Surgery, Orthopaedic Surgery, Emergency Medicine, Family Medicine, other programmes)

Some topics will be more applicable to some specialties than to others (e.g. Orthopaedic Surgery residents need to focus more on hand injuries and bone healing while General Surgery residents need to know more about principles and techniques of breast reconstruction). Greater proficiency at technical skills is expected of residents in surgical programmes (and Emergency Medicine) than in other programmes.

A) KNOWLEDGE

General
Wound healing Bone healing Tendon healing Nerve healing Anatomy -- skin, hand, breast
Physical examination -- hand

Specific
Hand Fingertip injuries Extensor tendon lacerations Flexor tendon lacerations Fractures and dislocations Infections Common "tumours" (ganglia, giant cell tumours) Common inflammatory conditions (stenosing tenosynovitis, DeQuervain's tenosynovitis) Compression neuropathies (carpal tunnel syndrome, cubital tunnel syndrome) Skin Skin grafts Basic skin flaps Malignancies (basal cell carcinoma, squamous cell carcinoma, melanoma) Common benign lesions Ulcer management Breast Breast reduction Breast cancer and postmastectomy reconstruction (principles, techniques)

B) TECHNICAL SKILLS

Hand Repair of fingertip injuries Repair of extensor tendon lacerations Closed reduction and appropriate splinting of simple fractures and dislocations Incision and drainage of simple hand infections Minor hand surgeries (trigger finger releases, carpal tunnel releases)

Skin Harvesting skin grafts (split thickness, full thickness) Excision of lesions Debridement of ulcers

Senior Plastic Surgery Residents (3.3PGY3, PGY4, PGY5)

Residents should have a thorough grasp of all the basic knowledge and technical skills listed above plus the objectives outlined below. Residency training (and beyond) is a continuum of learning and not a series of quantum leaps from year to year. Generally speaking however, execution of more difficult cases is not expected until the more senior years (PGY4, PGY5, fellow).

A) KNOWLEDGE
Hand Trauma Management Principles of microsurgery and replantation Dupuytren's disease Tumours (soft tissue, bone) Compression neuropathies (all) Tendon transfers Rheumatoid hand Osteoarthritis Injection injuries Reflex sympathetic dystrophy Flaps Skin flaps (all) Fasciocutaneous flaps Myocutaneous flaps Osteocutaneous flaps Free flaps Breast Breast reconstruction - team approach Gynecomastia Aesthetic breast surgery (augmentation, mastopexy) Breast reduction techniques Head & Neck All topics covered in Head & Neck rotation (i.e. lump in the neck, premalignant and malignant disease, mandibular tumours/cysts, salivary gland tumours, etc.) Team management of the head and neck patient Flaps in the head and neck Mandibular reconstruction Eyelid reconstruction Lip reconstruction Cheek reconstruction Ear reconstruction Facial nerve palsy Aesthetic Abdominoplasty Liposuction Facelift Blepharoplasty Browlift Aesthetic breast surgery (as above) Miscellaneous Management of the renal dialysis patient (gangrenous extremities, ulcers, carpal tunnel syndrome, etc.) Sentinel lymph node biopsy Team management of sarcomas Other (less common at St. Joseph's Healthcare) Facial fractures Trunk and lower extremity reconstruction Congenital ear deformities

B) TECHNICAL SKILLS
Hand Repair of flexor tendon lacerations Microsurgical repair of nerves, vessels Replantations Open reduction and internal fixation of fractures/dislocations Excision of Dupuytren's disease Nerve decompression Tendon transfers Arthroplasties Flaps Skin flaps Fasciocutaneous flaps Myocutaneous flaps Osteocutaneous flaps Free flaps Breast Breast reduction Excision of gynecomastia Breast augmentation Mastopexy Breast reconstruction (tissue expanders, TRAM flaps) Head & Neck Local flaps Free flap reconstruction Reconstruction of specialized parts (eyelids, lips, ears) Facial nerve grafting Aesthetic Abdominoplasty Liposuction Facelift Blepharoplasty Browlift Miscellaneous Sentinel lymph node biopsy Other (less common at St. Joseph's Healthcare) Facial fractures Trunk and lower extremity reconstruction Congenital ear deformities

3.4 St. Joseph Surgeons
Dr. Thoma Office: Pager: Dictation:
Dr. Hynes Office: Pager: Dictation:
Dr. Levis Office: Pager: Dictation:
Dr. Patterson Office: Pager: Dictation:
Dr. Campbell Office: Pager: Dictation:
Dr. Moscrap Office: Pager: Dictation:

4. Plastic Surgery Rotations Objectives at McMaster University Medical Centre
4.1 General Objectives

**Communicator** - The paediatric focus of this rotation requires focus on communicator skills with children and parents in both ambulatory and emergency situations with clear communication with staff, allied health personnel and accurate documentation are also required.

**Collaborator** - Many paediatric clinical problems require coordination of patient management with physicians from other services (e.g. paediatrics, paediatric general surgery, ICU, etc.) and with allied health professionals (e.g. OT/PT, nutrition and child life).

**Manager** - Wise management of health care resources with cost-effective bed management strategies to provide optimal care to the surgical patient. Daily rounds and progress notes on all inpatients. Appropriate planning and distribution of human resources to balance service requirements and educational opportunities.

**Health Advocate** - Counseling of patients and families regarding their child's illness and treatment including prevention strategies, understanding patient advocacy, paediatric consent issues and role of Children's Aid.

**Scholar** - Reviewing surgical journals and other medical and surgical sources of information regarding diagnostic and therapeutic guidelines. Participation in the education of medical students and paramedical personnel. Participate in research activity to advance our field.

**Professional** - Professional and ethical behavior is required at all times. Specifically reliability, responsibility and honesty are expected and required. Understanding, tolerance and sensitivity for gender racial differences and religious beliefs. Health care personnel in the Emergency Department, Short Stay Unit, OR and hospital wards.

4.2 Knowledge

**General**
Anatomy, embryology and physiology of paediatric problems. Appropriate history and physical exam pertinent to the paediatric patient.

**Specific**

**Paediatric Hand**
Congenital Anomalies: syndactyly, polydactyly, amniotic bands, failure formation Hand Trauma including: Fingertip injuries Extensor tendon lacerations Flexor tendon lacerations Fractures and dislocations Infections Common "tumours" (ganglia, giant cell tumours) Common inflammatory conditions (stenosing tenosynovitis, Juvenile Rheumatoid Arthritis)

**Skin**
Congenital nevi Vascular malformation Skin grafts Basic skin flaps
Breast
Breast asymmetry Tuberoso breast Gynecomastia

Craniofacial
Cleft lip and palate Cranial vault abnormality Craniofacial tumors Congenital ear reconstruction

Oculoplastic Surgery
Ptosis Correction Ectopion Entropion Eyelid Surgery

Pediatric Neurosurgery
meminomyelcele repair

Pediatric Urology
Hypospadias; epispiadias Pedia

Peripheral Nerve
Paediatric and adult brachial plexus Nerve injury treatment Rheumatoid hand

Head & Neck
Cheek reconstruction Ear reconstruction Facial nerve palsy

4.3 Technical Skills

Paediatric Hand
Individualization digits polydactyly reconstruction Repair of flexor tendon lacerations Microsurgical repair of nerves, vessels Open reduction and internal fixation of fractures/dislocations Tendon transfers

Breast
Excision of gynecomastia Breast augmentation/reduction Mastopexy/tuberous breast Breast reconstruction (tissue expanders, TRAM flaps)

Craniofacial
Design/exposure cleft lip/cleft palate Rhinoplasty CLN Congenital ear otoplasty

Nerve
Exploration brachial plexus Other nerve exploration/repair/decompression Secondary tendon transfer

Other
Facial fractures Trunk and lower extremity reconstruction