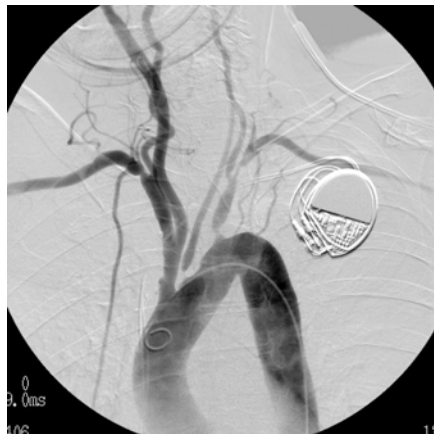




THE UNIVERSITY OF BRITISH COLUMBIA
DIVISION OF VASCULAR SURGERY

**POST GRADUATE TRAINING
PROGRAM IN VASCULAR SURGERY
FELLOWSHIP MANUAL**





THE UNIVERSITY OF BRITISH COLUMBIA
DIVISION OF VASCULAR SURGERY
FELLOWSHIP MANUAL

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THE UNIVERSITY OF BRITISH COLUMBIA

DIVISION OF VASCULAR SURGERY

I. INTRODUCTION

The University of British Columbia, Division of Vascular Surgery is a clinical division within the Department of Surgery dedicated to the field of Vascular Surgery and medicine. There are nine academic members situated at two academic hospitals (Vancouver General and St. Paul's Hospital). There is a Royal College approved, two year training program in Vascular Surgery, with one Vascular Fellow accepted per year.

The Division has research interests in the etiology of atherosclerosis, photodynamic therapy, aneurismal disease, cerebral vascular disease, clinical trials and non-invasive vascular diagnosis.

The Division provides exposure and teaching of vascular surgery and vascular medicine to undergraduate and post graduate trainees.

The Division of Vascular Surgery may be found on the UBC Surgery website at:
www.surgery.ubc.ca/vascularsurg.html

A. POST GRADUATE TRAINING PROGRAM

The UBC Division of Vascular Surgery offers a two-year Post Graduate Training program open to candidates who have completed fellowship training for Royal College Certification in General, Thoracic or Cardiac Surgery.

This Fellowship is fully accredited by the Royal College of Physicians and Surgeons of Canada and offers training leading to the Royal College Certificate of Special Competence in Vascular Surgery.

The program is two years in length with a minimum of 15 months in clinical vascular surgery and three months in the endovascular rotation. The remaining six months consist of vascular research.

One candidate is accepted each year. Interviews are undertaken in the Spring for positions to be commenced in July of the following year.



UBC DIVISION OF VASCULAR SURGERY

II ROTATION GOALS AND OBJECTIVES

A. VANCOUVER GENERAL HOSPITAL

1. INTRODUCTION TO THE VASCULAR SURGERY SERVICE FOR RESIDENTS AT VGH

Welcome to the Vascular Surgery Service at Vancouver General Hospital. I hope your rotation with us is enjoyable and educational. To help make this a productive rotation, I have outlined some general expectations and learning objectives.

RESPONSIBILITY

Senior Resident or Fellow

The Senior Resident or Fellow will be responsible for the day-to-day running of the Ward, the organization of Emergency Room, in-hospital consultations and arranging assists in the operating room for the vascular surgery cases. He/she will be responsible for the senior level call (1 in 3) and will also be responsible, in conjunction with the other Vascular Fellows, for the scheduling and presentation of Vascular Surgery Rounds every Wednesday morning at 7:00 am.

Junior Residents

Junior Residents will be responsible to the Senior Resident for assisting in the operating room, Ward coverage, Rounds and, at the direction of the Senior Resident, inpatient and emergency room consultation. From time-to-time, the Junior Residents may be asked to participate in presentations of the Vascular Surgery Rounds.

Consulting Staff

Consulting staff are available at all times for problems and concerns. All calls related to a given inpatient should be directed to the attending vascular surgeon listed on the patients' chart. If that vascular surgeon is unavailable, calls are automatically redirected by our answering service to the surgeon on call. On weekends, only one vascular surgeon is available, the on-call surgeon. On weekdays the consulting vascular surgeons look after their own patients. On weeknights, the on call surgeon is the responsible consultant. Unassigned patients consulted from the Emergency Room or from other services, should be directed to the surgeon on call.

EDUCATIONAL RESPONSIBILITIES.

Residents are expected to inform the Attending Staff of their educational responsibilities (teaching or academic time) when it affects operating room coverage but are expected to attend their educational and academic half days without being interrupted by service requirements. The Senior Resident or Attending Staff should be available for coverage of Junior Resident responsibilities during these times.

WARD ISSUES

A, Step Down Unit

Calls to the step-down unit should be answered at the resident level, not the medical student level, both during the day and in the evening. Rounds in the step-down unit should be done twice a day; morning and end of the day with the charge nurse.

B. Ward Rounds

Normal morning ward rounds should be done before operating responsibilities and should be done in conjunction with the Charge Nurse to facilitate communication between the Nursing Teams and Physician Teams. The structure of the morning rounds is otherwise at the discretion of the Senior Resident but it is expected that all vascular surgery patients on the Ward and in the Intensive Care Unit will be reviewed every morning by the resident team in a co-coordinated fashion.

OTHER RESPONSIBILITIES

It is expected that the residents, both Junior and Senior, should spend half a day a week in ambulatory care at one of the surgeon's offices. This may involve the Senior Resident covering some Junior Resident responsibilities to allow this to occur without interruption of service. Other opportunities for surgical exposure include the Surgical Day Care Unit, and the line time for portacath and Hickman line placements in the cardiac catheterization lab daily. Regular schedules for resident assignment to those activities are circulated.

CLINICAL ISSUES

All requests for vascular surgery opinions are formal consults. This means that all vascular opinion requests:

- ◇ have a written consultation
- ◇ are discussed with **both** senior resident and the consulting vascular surgeon
- ◇ are done expediently..

Telephone consults and hallway consults on in-hospital patients are not acceptable. Consults without discussion with the attending vascular surgeon are not acceptable.

All patients must have an identified consulting vascular surgeon that is the admitting or consulting surgeon. All calls/concerns regarding a patient should be discussed with that vascular surgeon during normal working hours (0800-1800). Outside these hours all calls/concerns should be directed to the on-call surgeon.

This means:

- ◇ once a surgeon has consulted on a patient, that surgeon remains the patient's attending vascular surgeon for the duration of that patient's treatment.
- ◇ In the interest of continuity of care, a patient's consulting surgeon should not change daily with the call schedule.

Residents are on call for Vascular Surgery – VGH site only. Outside calls for consultations from other hospitals (including UBC site & BCCA) should be handled by the consultant surgeon on call.

All Vascular Surgery residents should make themselves familiar with common vascular surgical problems particularly vascular surgery emergencies including:

- ◇ Management of symptomatic or ruptured abdominal aortic aneurysm
- ◇ Management of the acutely ischemic leg
- ◇ Management of vascular access for hemodialysis complications including thrombosis, infection or bleeding
- ◇ Management of vascular injuries including femoral artery injury from catheterization
- ◇ Postoperative care of abdominal aortic aneurysm patients, endarterectomy patients, and bypass patients.
- ◇ Postoperative wound care
- ◇ Management of chest pain and shortness of breath in post operative patients
- ◇ Referral for Hickman line or portacath insertion for vascular access for chemotherapy

Hickman Lines and Portacaths

There is a large volume of minor vascular access procedures required at this hospital. The procedure for these consultations is to inform the attending surgeon and inform that surgeon's office secretary of the patient's name, location and need for Hickman Line or Portacath. The Vascular Surgery Office will then proceed with booking the patient into the next available vascular access slot – usually within 24 hours. These patients should not be referred to Radiology for their procedure.

Inferior Vena Cava Filters

These procedures are usually urgent and are performed in the Operating Room by the vascular surgery service – usually as a <8 hour booking. These procedures should not be referred to Radiology.

Vascular Access for Hemodialysis

There is a large volume of vascular access procedures for hemodialysis access. These patients should be assessed with electrolytes and for fluid overload and if revision of their access is required, should usually be booked within 24 hours on the Emergency Slate as well as informing the attending vascular surgeon.

Goals and Objectives

Please review the Core Year Rotation Goals and Objectives including the expected basic vascular surgical operative techniques to assure that you master these.

RESIDENT EVALUATIONS

Formal evaluation of residents will occur near the end of each rotation. Please ensure that an interview is scheduled with the Chief of Service before the end of your rotation to review your evaluation.

RESOURCE PEOPLE

Acting Head Division of Vascular Surgery	Dr. Lynn Doyle	(604) 874-7888
Program Director – Vascular Surgery	Dr. Jerry Chen	(604) 708-5679
Vascular Surgery Division Secretary (Academic)	Nicky Dorken	(604) 875-4150
Patient Services Manager	Sandie Kocher	(604) 707-3099
Nurse Clinician T8	Wendy Mar pager	62401 (604) 707-3099
Patient Services Coordinators	Rita Low Kieley Perrins	pgr 87-03699 87-03699



UBC DIVISION OF VASCULAR SURGERY

2. INTRODUCTION TO THE VANCOUVER GENERAL HOSPITAL ROTATION SPECIFIC OBJECTIVES FOR THE SENIOR VASCULAR RESIDENT

VGH is a large tertiary referral teaching hospital and a Level I Trauma center for British Columbia where majority of complex trauma cases are referred. As such, **VGH** offers unique learning opportunities for the senior vascular resident in the following areas:

- Complex vascular trauma
- Endovascular aneurysm repair done in a collaborative fashion within radiology suite and operating room with expert interventional radiologists and surgeons
- Percutaneous procedures in the OR taught by endovascular trained surgeons
- Surgical Oncology cases with complex tumor resections and vascular reconstructions
- Endovenous laser therapy (EVLT) done in an outpatient office setting
- Non-hospital based vascular surgery clinic practice
- Private for profit surgery centre experience at the Ambulatory Care Surgery Centre

At the completion of training, the resident will have acquired the following competencies and will function effectively as:

MEDICAL EXPERT/CLINICAL DECISION-MAKER

Modern vascular surgeons must possess a defined body of knowledge, open operative and endovascular procedural skills that are used to collect and interpret data, make appropriate clinical decisions, and carry out diagnostic and therapeutic procedures within the boundaries of their discipline and expertise. The role of medical expert/clinical decision-maker is central to the function of vascular surgeons and draws on the competencies included in the other major roles of scholar, communicator, health advocate, manager, collaborator, and professional.

General Requirements

- Demonstrate diagnostic and therapeutic skills for ethical and effective patient care.
- Access and apply relevant information to clinical practice.
- Demonstrate effective consultation services with respect to patient care, education and legal opinions.

Specific Requirements

- Demonstrate cognitive understanding of patient care problems with vascular disease as well as the diagnostic and therapeutic skills to effectively and ethically manage these problems.
- Elicit a history that is relevant, concise, accurate and appropriate to the patient's problem(s).
- Perform physical examination that is relevant, sufficiently thorough, and appropriate and meets specialty specific standards and, if necessary, exceeds these standards.
- Select medically appropriate investigative tools in a cost-effective, ethical and useful manner.

Demonstrate an understanding of and the capacity to solve problems in relation to the following knowledge of:

- The anatomy, physiology, and pathophysiology of the circulatory system in health and disease, including arterial wall and cell biology, hemodynamics, and ischemia-related organ dysfunction.
- Biostatistics and epidemiology as they relate to vascular surgery.
- The differing patterns of disease, natural history, and responses to treatment of vascular disease in men and women and in different racial and cultural groups.
- Aneurysms of the aorta and other vessels
- Chronic lower extremity arterial occlusive disease
- Acute and chronic visceral ischemia including renal artery occlusive disease
- Extracranial cerebrovascular disease
- Intrathoracic non-coronary vascular disease
- Chronic upper extremity occlusive disease
- Thoracic outlet syndrome
- Acute arterial occlusion.
- Local and systemic complications of vascular therapy.
- Vascular trauma
- Aortic dissections
- Venous thromboembolic disease
- Chronic venous diseases
- Lymphedema
- Amputations
- Endovascular therapy
- Risk stratification and risk factor modification in vascular disease
- Coagulation disorders
- Vasospastic disorders
- Non-atherosclerotic vascular disease

- Arterial venous malformations
- Hemoaccess
- Noninvasive and invasive diagnosis and radiation safety
- Biological and synthetic grafts and complications.

Apply knowledge and expertise to performance of technical skills relevant to vascular surgery, including:

- The ability to perform the common and complex surgical procedures in vascular surgery safely and competently with the ability and confidence to deal with unexpected findings at operation.
- Knowledge in the application of, and interpretative skills in, venography, angiography and invasive imaging modalities.
- Knowledge and skills in the application of endovascular interventions, and other treatment modalities.
- The capacity to access and apply relevant information as well as new and current therapeutic options to clinical practice.
- Medical expertise in situations other than in direct patient care. (e.g., presentations, medico-legal cases, etc.).
- Effective consultation skills in presenting well-documented assessments and recommendations in written and/or verbal form in response to a request from another health care provider.

COMMUNICATOR

To provide humane, high-quality care, vascular surgeons must establish effective relationships with patients, other physicians, and other health professionals. Communication skills are essential for the functioning of a vascular surgeon, and are necessary for obtaining information from, and conveying information to patients and their families. Furthermore, these abilities are critical in eliciting patients' beliefs, concerns, and expectations about their illnesses, and for assessing key factors impacting on patients' health. At the **VGH**, effective interdisciplinary communication is practiced and demonstrated during Wednesday morning Joint City Wide Vascular Rounds and Thursday morning X-ray Conference.

General Requirements

- Establish therapeutic relationships with patients/families.
- Obtain and synthesize relevant history from patients/families/communities.
- Listen effectively.
- Discuss appropriate information with patients/families and the health care team.

Specific Requirements

- Establish therapeutic relationships with patients that are characterized by understanding, trust, respect, empathy and confidentiality.
- Elicit and synthesize relevant information from the patient, their family, and/or community about his/her problem, while considering the influence of factors such as the patient's age, gender, ethnic, cultural and socioeconomic background, and spiritual values on that illness.
- Discuss appropriate information with the patient and his/her family, and effectively communicate this information with other health care providers that facilitates optimal health care of the patient.

COLLABORATOR

Vascular surgeons work in partnership with others who are appropriately involved in the care of individuals or specific groups of patients. At the **VGH**, this is especially evident in the relationship with interventional radiology during endovascular procedures. It is therefore essential for vascular surgeons to be able to collaborate effectively with patients and a multidisciplinary team of expert health professionals for provision of optimal patient care, education, and research.

General Requirements

- Consult effectively with other physicians and health care professionals.
- Contribute effectively to other interdisciplinary team activities.

Specific Requirements

- contribute effectively to other interdisciplinary team activities. This includes activities in hospitals, practice settings, and other institutions, such as committee work, research, undergraduate and postgraduate teaching, and learning.

MANAGER

Vascular surgeons function as managers when they make everyday practice decisions involving resources, co-workers, tasks, policies, and their personal lives. They do this in the settings of individual patient care, practice organizations, and in the broader context of the health care system. Thus, specialists require the abilities to prioritize and effectively execute tasks through teamwork with colleagues, and make systematic decisions when allocating finite health care resources. The **VGH** vascular surgeons have private offices based outside the hospital. Some are solo practices some are grouped. Some surgeons have started conversion into paperless electronic medical record system. The resident will be exposed to varied office practice management styles. Some

surgeons also perform surgery at private for profit surgery centers. The resident can learn how private and cosmetic services compliment vascular surgeons daily practice.

General Requirements

- Utilize resources effectively to balance patient care, learning needs, and outside activities.
- Allocate finite health care resources wisely.
- Work effectively and efficiently in a health care organization.
- Utilize information technology to optimize patient care, life-long learning and other activities.

Specific Requirements

- Allocate finite health care and health education resources effectively.
- Work effectively and efficiently in a health care organization, ranging from national to an individual clinical practice to organizations at the local and regional level
- Understand population-based approaches to health care services and the Canadian health care system and their implication for medical practice.
- Participate in planning, budgeting, evaluation and outcome of a patient care program.
- Effectively utilize information technology such as literature searches and vascular databases to optimize patient care, continued self-learning, and other activities
- Utilize time and resources effectively in order to balance patient care, earning needs, outside activities, and personal life.
-

HEALTH ADVOCATE

Vascular surgeons recognize the importance of advocacy activities in responding to the challenges represented by those social, environmental, and biological factors that determine the health of patients and society. They recognize advocacy as an essential and fundamental component of health promotion that occurs at the level of the individual patient, the practice population, and the broader community. Health advocacy is appropriately expressed both by the individual and collective responses of vascular surgeons in influencing public health and policy.

General Requirements

- Identify the important determinants of health affecting patients.
- Contribute effectively to improved health of patients and communities.
- Recognize and respond to those issues where advocacy is appropriate.

Specific Requirements

- Identify the risk factors and other determinants of health that affect a patient with vascular diseases, so as to be able to effectively contribute to improving individual and societal health in Canada.
- Recognize and respond to those issues, settings, circumstances, or situations in which advocacy on behalf of patients, professions, or society are appropriate.
- Be knowledgeable about the local resources that are available for patient management, support and rehabilitation to improve their physical, and emotional well being.

SCHOLAR

Vascular surgeons engage in a lifelong pursuit of mastery of their domain of professional expertise. They recognize the need to be continually learning and model this for others. Through their scholarly activities, they contribute to the appraisal, collection, and understanding of health care knowledge, and facilitate the education of their students, patients, and others. At **VGH** rotation, regular discussion and critical appraisal of current literature is encouraged during informal bedside patient case discussions as well as during Wednesday morning rounds, Thursday afternoon seminars and monthly Journal club.

General Requirements

- Develop, implement and monitor a personal continuing education strategy.
- Critically appraise sources of medical information.
- Facilitate learning of patients, housestaff/students and other health professionals.
- Contribute to development of new knowledge.

Specific Requirements

- Develop, implement, and document a personal continuing education strategy.
- Apply the principles of critical appraisal to sources of medical information by incorporating a spirit of scientific enquiry and use of evidence into clinical decision-making.

- Demonstrate the ability to select an appropriate question, efficiently search for and assess the quality of evidence in literature and to keep up to date with the evidence-based standard of care for the conditions most commonly seen in his/her vascular practice.

PROFESSIONAL

Vascular surgeons have an important societal role as professionals with a distinct body of knowledge, skills, and attitudes dedicated to improving the health and well-being of others. Vascular surgeons are committed to the highest standards of excellence in clinical care and ethical conduct, and to continually perfecting mastery of their discipline. At the **VGH**, quality assurance of patient care and procedural results are regularly audited and discussed at the Wednesday morning complication rounds.

General Requirements

- Deliver highest quality care with integrity, honesty and compassion.
- Exhibit appropriate personal and interpersonal professional behaviours.
- Practise medicine ethically consistent with obligations of a physician.

Specific Requirements

- Deliver the highest quality care with integrity, honesty and compassion including: display attitudes commonly accepted as essential to professionalism; use appropriate strategies to maintain and advance professional competence; continually evaluate one's abilities, knowledge and skills and know one's limitations of professional competence; exercise appropriate judgment of knowing when to refer the patient.
- Exhibit appropriate personal and interpersonal professional behaviors.
- Practice medicine in an ethically responsible manner that respects the medical, legal and professional obligations of belonging to a self-regulating body.



UBC DIVISION OF VASCULAR SURGERY

B. ST. PAUL'S HOSPITAL

1. INTRODUCTION TO THE VASCULAR SURGERY SERVICE FOR RESIDENTS AT SPH

Welcome to the Vascular Surgery Service at St. Paul's Hospital. I hope your rotation with us is enjoyable and educational. To help make this a productive rotation, I have outlined some general expectations and learning objectives.

OVERVIEW

The vascular surgical service at St. Paul's is completely hospital based. Inpatients are located on wards 10A or 10B. The three surgeons, Drs. Reid, MacDonald and Sidhu, have administrative/working offices in the Department of Surgery on 3rd Floor Burrard. All outpatient clinics are held in the Surgical Outpatient Department on 3 Burrard. If not already done, residents are expected to have ID cards and a password for the Sunrise Clinical Manager system (access to patients results / documents / charts). As part of the orientation package, residents are given a SPH parking pass and keys to the surgeons' offices, which can be used throughout the rotation.

RESPONSIBILITY

Senior Resident or Fellow

When there is a senior resident or fellow on the service he/she will be responsible for the day-to-day running of the Ward, the organization of Emergency Room, in-hospital consultations and arranging assists in the operating room for the vascular surgery cases. He/she will be responsible for the senior level call.

Junior Residents

Junior Residents will be responsible to the Senior Resident for assisting in the operating room, Ward coverage, Rounds and, at the direction of the Senior Resident, inpatient and emergency room consultation. From time-to-time, the Junior Residents may be asked to participate in presentations of the Vascular Surgery Rounds. If there is no senior resident on the service, the junior resident will be responsible for the day-to-day running of the service under faculty guidance.

Consulting Staff

Consulting staff are available at all times for problems and concerns. All calls related to a given inpatient should be directed to the attending vascular surgeon listed on the patients' chart. If that vascular surgeon is unavailable, calls should be directed to the surgeon on call. On weekends, only one vascular surgeon is available, the on-call surgeon. On weekdays the consulting vascular surgeons look after their own patients. On weeknights, the on call surgeon is the responsible consultant. Unassigned patients consulted from the Emergency Room or from other services, should be directed to the surgeon on call.

EDUCATIONAL RESPONSIBILITIES.

On Thursday mornings, residents are expected to have rounded before 7:30 AM. The entire service meets at 7:30 for M&M rounds. Following this, the entire service does "walk around" rounds and reviews each patient. The residents are to provide a 30 second synopsis/presentation of each patient during these rounds. Following rounds, one of the housestaff on the service is expected to give a 15-30 minute presentation on a vascular surgery topic.

Residents are expected to inform the Attending Staff of their educational responsibilities (teaching or academic time) and are expected to attend their educational and academic half days without being interrupted by service requirements. The Senior Resident or Attending Staff should be available for coverage of Junior Resident responsibilities during these times.

WARD ISSUES

A. Ward Rounds

Normal morning ward rounds should be done before operating room and clinic / office responsibilities. Handover should occur in the morning and at the end of the day with the resident on call regarding all active / new patients. Upon completion of rounds, major directions in treatment plans / patient discharge planning etc should be discussed with the Charge Nurse to facilitate communication between the Nursing Teams and Physician Teams. The structure of the morning rounds is otherwise at the discretion of the housestaff but it is expected that all vascular surgery patients on the Ward, in the Post-Anaesthesia Recovery room and in the Intensive Care Unit will be reviewed every morning by the resident team in a co-coordinated fashion.

OTHER RESPONSIBILITIES

It is expected that the residents, both Junior and Senior, should regularly attend outpatient ambulatory clinics. The service has clinic days in the outpatient department on Burrard 3 on Tuesdays and Thursdays. In addition, there is usually a vascular access clinic every Monday afternoon on 6B and, often, a vein clinic Wednesday afternoon at Mt. St. Joseph's hospital.

CLINICAL ISSUES

All requests for vascular surgery opinions are formal consults. This means that all vascular opinion requests:

- ◇ have a written consultation
- ◇ are discussed with **both** senior resident (when on service) and the consulting vascular surgeon
- ◇ are done expediently

Telephone consults and hallway consults on in-hospital patients are not acceptable. Consults without discussion with the attending vascular surgeon are not acceptable. All patients must have an identified consulting vascular surgeon that is the admitting or consulting surgeon. All calls/concerns regarding a patient should be discussed with that vascular surgeon during normal working hours (0800-1800). Outside these hours all calls/concerns should be directed to the on-call surgeon.

This means:

- ◇ once a surgeon has consulted on a patient, that surgeon remains the patient's attending vascular surgeon for the duration of that patient's treatment.
- ◇ In the interest of continuity of care, a patient's consulting surgeon should not change daily with the call schedule.

Residents are on call for Vascular Surgery – SPH only. Outside calls for consultations from other hospitals (including MSJ) should be handled by the consultant surgeon on call.

All Vascular Surgery residents should make themselves familiar with common vascular surgical problems particularly vascular surgery emergencies including:

- ◇ Management of symptomatic or ruptured abdominal aortic aneurysm
- ◇ Management of the acutely ischemic leg
- ◇ Management of vascular access for hemodialysis complications including thrombosis, infection, bleeding, steal syndrome
- ◇ Management of vascular injuries including femoral artery injury from catheterization
- ◇ Postoperative care of abdominal aortic aneurysm patients, endarterectomy patients, and bypass patients.
- ◇ Postoperative wound care

- ◇ Management of chest pain and shortness of breath in post operative patients
- ◇ Referral for vascular access devices for long-term intravenous therapy / nutrition

Vascular Access for Hemodialysis

There is a large volume of vascular access procedures for hemodialysis access. These patients should be assessed with electrolytes and for fluid overload and if revision of their access is required. The treatment (endovascular / surgical / conservative) should be discussed with the attending vascular surgeon in conjunction with the nephrology team.

Goals and Objectives

Please review the Core Year Rotation Goals and Objectives including the expected basic vascular surgical operative techniques to assure that you master these.

RESIDENT EVALUATIONS

Formal evaluation of residents will occur near the end of each rotation. Please ensure that an interview is scheduled with the Chief of Service before the end of your rotation to review your evaluation.

RESOURCE PEOPLE

Faculty: (604) 806-8698 or SPH 604-682-2344 x63160

Dr. Jock Reid, Division Head

Dr. Shaun MacDonald

Dr. Ravi Sidhu

Division Secretary St. Paul's

604-682-2344 local 63160

Pam Powell



UBC Division of Vascular Surgery

2. INTRODUCTION TO THE ST. PAUL'S HOSPITAL ROTATION FOR SENIOR VASCULAR RESIDENTS

St. Paul's Hospital is a large downtown tertiary referral hospital our largest dialysis access population, excellent multidisciplinary carotid stenting and EVAR program. The unique learning opportunities at St. Paul's Hospital are as follows:

- Dialysis access surgery with multidisciplinary renal access clinic
- Endovascular aneurysm repair done in the OR with collaboration by a team of multidisciplinary experts
- Multidisciplinary carotid stenting program
- Unique minimal invasive cardiac valve program with frequent complex vascular access issues
- Hospital base academic practice

MEDICAL EXPERT/CLINICAL DECISION-MAKER

Modern vascular surgeons must possess a defined body of knowledge, open operative and endovascular procedural skills that are used to collect and interpret data, make appropriate clinical decisions, and carry out diagnostic and therapeutic procedures within the boundaries of their discipline and expertise. The role of medical expert/clinical decision-maker is central to the function of vascular surgeons and draws on the competencies included in the other major roles of scholar, communicator, health advocate, manager, collaborator, and professional.

General Requirements

- Demonstrate diagnostic and therapeutic skills for ethical and effective patient care.
- Access and apply relevant information to clinical practice.
- Demonstrate effective consultation services with respect to patient care, education and legal opinions.

Specific Requirements

- Demonstrate cognitive understanding of patient care problems with vascular disease as well as the diagnostic and therapeutic skills to effectively and ethically manage these problems.
- Elicit a history that is relevant, concise, accurate and appropriate to the patient's problem(s).

- Perform physical examination that is relevant, sufficiently thorough, and appropriate and meets specialty specific standards and, if necessary, exceeds these standards.
- Select medically appropriate investigative tools in a cost-effective, ethical and useful manner.

Demonstrate an understanding of and the capacity to solve problems in relation to the following knowledge of:

- The anatomy, physiology, and pathophysiology of the circulatory system in health and disease, including arterial wall and cell biology, hemodynamics, and ischemia-related organ dysfunction.
- Biostatistics and epidemiology as they relate to vascular surgery.
- The differing patterns of disease, natural history, and responses to treatment of vascular disease in men and women and in different racial and cultural groups.
- Aneurysms of the aorta and other vessels
- Chronic lower extremity arterial occlusive disease
- Acute and chronic visceral ischemia including renal artery occlusive disease
- Extracranial cerebrovascular disease
- Intrathoracic non-coronary vascular disease
- Chronic upper extremity occlusive disease
- Thoracic outlet syndrome
- Acute arterial occlusion.
- Local and systemic complications of vascular therapy.
- Vascular trauma
- Aortic dissections
- Venous thromboembolic disease
- Chronic venous diseases
- Lymphedema
- Amputations
- Endovascular therapy
- Risk stratification and risk factor modification in vascular disease
- Coagulation disorders
- Vasospastic disorders
- Non-atherosclerotic vascular disease
- Arterial venous malformations
- Hemoaccess
- Noninvasive and invasive diagnosis and radiation safety
- Biological and synthetic grafts and complications.

Apply knowledge and expertise to performance of technical skills relevant to vascular surgery, including:

- The ability to perform the common and complex surgical procedures in vascular surgery safely and competently with the ability and confidence to deal with unexpected findings at operation.
- Knowledge in the application of, and interpretative skills in, venography, angiography and invasive imaging modalities.
- Knowledge and skills in the application of endovascular interventions, and other treatment modalities.
- The capacity to access and apply relevant information as well as new and current therapeutic options to clinical practice.
- Medical expertise in situations other than in direct patient care. (e.g., presentations, medico-legal cases, etc.).
- Effective consultation skills in presenting well-documented assessments and recommendations in written and/or verbal form in response to a request from another health care provider.

COMMUNICATOR

To provide humane, high-quality care, vascular surgeons must establish effective relationships with patients, other physicians, and other health professionals. Communication skills are essential for the functioning of a vascular surgeon, and are necessary for obtaining information from, and conveying information to patients and their families. Furthermore, these abilities are critical in eliciting patients' beliefs, concerns, and expectations about their illnesses, and for assessing key factors impacting on patients' health. At the St. Paul's Hospital, effective interdisciplinary communication is practiced and demonstrated during Wednesday morning Joint City Wide Vascular Rounds and regular informal X-ray conferences with interventional radiologists and cardiologists.

General Requirements

- Establish therapeutic relationships with patients/families.
- Obtain and synthesize relevant history from patients/families/communities.
- Listen effectively.
- Discuss appropriate information with patients/families and the health care team.

Specific Requirements

- Establish therapeutic relationships with patients that are characterized by understanding, trust, respect, empathy and confidentiality.
- Elicit and synthesize relevant information from the patient, their family, and/or community about his/her problem, while considering the influence

of factors such as the patient's age, gender, ethnic, cultural and socioeconomic background, and spiritual values on that illness.

- Discuss appropriate information with the patient and his/her family, and effectively communicate this information with other health care providers that facilitates optimal health care of the patient.

COLLABORATOR

Vascular surgeons work in partnership with others who are appropriately involved in the care of individuals or specific groups of patients. At the St. Paul's Hospital this is especially evident in the relationship with interventional radiology during endovascular procedures. It is therefore essential for vascular surgeons to be able to collaborate effectively with patients and a multidisciplinary team of expert health professionals for provision of optimal patient care, education, and research.

General Requirements

- Consult effectively with other physicians and health care professionals.
- Contribute effectively to other interdisciplinary team activities.

Specific Requirements

- contribute effectively to other interdisciplinary team activities. This includes activities in hospitals, practice settings, and other institutions, such as committee work, research, undergraduate and postgraduate teaching, and learning.

MANAGER

Vascular surgeons function as managers when they make everyday practice decisions involving resources, co-workers, tasks, policies, and their personal lives. They do this in the settings of individual patient care, practice organizations, and in the broader context of the health care system. Thus, specialists require the abilities to prioritize and effectively execute tasks through teamwork with colleagues, and make systematic decisions when allocating finite health care resources. The St. Paul's vascular surgeons have hospital based group practice. The resident will be exposed to this type of office practice management style.

General Requirements

- Utilize resources effectively to balance patient care, learning needs, and outside activities.
- Allocate finite health care resources wisely.
- Work effectively and efficiently in a health care organization.

- Utilize information technology to optimize patient care, life-long learning and other activities.

Specific Requirements

- Allocate finite health care and health education resources effectively.
- Work effectively and efficiently in a health care organization, ranging from national to an individual clinical practice to organizations at the local and regional level
- Understand population-based approaches to health care services and the Canadian health care system and their implication for medical practice.
- Participate in planning, budgeting, evaluation and outcome of a patient care program.
- Effectively utilize information technology such as literature searches and vascular databases to optimize patient care, continued self-learning, and other activities
- Utilize time and resources effectively in order to balance patient care, earning needs, outside activities, and personal life.

HEALTH ADVOCATE

Vascular surgeons recognize the importance of advocacy activities in responding to the challenges represented by those social, environmental, and biological factors that determine the health of patients and society. They recognize advocacy as an essential and fundamental component of health promotion that occurs at the level of the individual patient, the practice population, and the broader community. Health advocacy is appropriately expressed both by the individual and collective responses of vascular surgeons in influencing public health and policy.

General Requirements

- Identify the important determinants of health affecting patients.
- Contribute effectively to improved health of patients and communities.
- Recognize and respond to those issues where advocacy is appropriate.

Specific Requirements

- Identify the risk factors and other determinants of health that affect a patient with vascular diseases, so as to be able to effectively contribute to improving individual and societal health in Canada.
- Recognize and respond to those issues, settings, circumstances, or situations in which advocacy on behalf of patients, professions, or society is appropriate.

- Be knowledgeable about the local resources that are available for patient management, support and rehabilitation to improve their physical, and emotional well being.

SCHOLAR

Vascular surgeons engage in a lifelong pursuit of mastery of their domain of professional expertise. They recognize the need to be continually learning and model this for others. Through their scholarly activities, they contribute to the appraisal, collection, and understanding of health care knowledge, and facilitate the education of their students, patients, and others. At St. Paul's rotation, regular discussion and critical appraisal of current literature is encouraged during informal bedside discussions as well as during Thursday morning rounds and monthly Journal club.

General Requirements

- Develop, implement and monitor a personal continuing education strategy.
- Critically appraise sources of medical information.
- Facilitate learning of patients, housestaff/students and other health professionals.
- Contribute to development of new knowledge.

Specific Requirements

- Develop, implement, and document a personal continuing education strategy.
- Apply the principles of critical appraisal to sources of medical information by incorporating a spirit of scientific enquiry and use of evidence into clinical decision making.
- Demonstrate the ability to select an appropriate question, efficiently search for and assess the quality of evidence in literature and to keep up to date with the evidence-based standard of care for the conditions most commonly seen in his/her vascular practice.

PROFESSIONAL

Vascular surgeons have an important societal role as professionals with a distinct body of knowledge, skills, and attitudes dedicated to improving the health and well-being of others. Vascular surgeons are committed to the highest standards of excellence in clinical care and ethical conduct, and to continually perfecting mastery of their discipline. At the St. Paul's hospital, quality assurance of patient care and procedural results are regularly audited and discussed at the Thursday morning Walking Rounds and monthly departmental complication rounds.

General Requirements

- Deliver highest quality care with integrity, honesty and compassion.
- Exhibit appropriate personal and interpersonal professional behaviours.
- Practise medicine ethically consistent with obligations of a physician.

Specific Requirements

- Deliver the highest quality care with integrity, honesty and compassion including: display attitudes commonly accepted as essential to professionalism; use appropriate strategies to maintain and advance professional competence; continually evaluate one's abilities, knowledge and skills and know one's limitations of professional competence; exercise appropriate judgement of knowing when to refer the patient.
- Exhibit appropriate personal and interpersonal professional behaviours.
- Practice medicine in an ethically responsible manner that respects the medical, legal and professional obligations of belonging to a self-regulating body.



UBC Division of Vascular Surgery

C. SUB SPECIALTY ROTATIONS

1. AMBULATORY CARE TEACHING OBJECTIVES

1. To encourage concepts of continuity of care based on familiarity with the normal evolution of vascular disease outside the hospital.
2. To understand the normal history of both treated and untreated vascular diseases, particularly for those patients who never enter the hospital.
3. To develop the ability to accurately assess the effects of medical, radiological, and surgical interventions as it relates to outcome, in the outpatient setting.
4. To learn the strengths and limitations of ambulatory care and indications for hospital admission.
5. To become proficient in ambulatory care procedures including varicose vein injection, temporary artery biopsy, saphenous vein high ligation, vein avulsion, vein stripping, and vascular access surgery.
6. To promote the understanding of the roles played by families, friends, other health care professionals and supportive services in patient care.
7. To promote recognition of the broad determinants of health, including an appreciation for the importance of social and physical environment.
8. To develop patient counseling skills with regard to risk factor management, disease prevention and health promotion.
9. To improve awareness of:
 - ◇ health economic issues in ambulatory care,
 - ◇ application of evaluative science in diagnostic and treatment modalities,
 - ◇ cost benefit analysis of treatment in the ambulatory vs. hospital setting.
10. To acquaint fellows with the types of investigational and interventional procedures, which can appropriately be carried out in the ambulatory settings.



UBC Division of Vascular Surgery

2. ROTATION OBJECTIVES IN INTERVENTIONAL RADIOLOGY FOR SENIOR VASCULAR RESIDENTS

INTRODUCTION

Vascular surgery is a specialty that is changing rapidly with majority of the clinical advances made in the endovascular procedures. Cooperation and sharing of endovascular information and cases between interventional radiology and vascular surgery is crucial for ongoing advances in this area of vascular surgery. In this rotation, the vascular resident will be part of the interventional radiology team, participate in the Thursday joint Interventional Radiology/ Vascular Surgery Rounds as well as daily functions of the interventional radiology units at St. Paul's, VGH and UBC hospital.

MEDICAL EXPERT/CLINICAL DECISION-MAKER

1. The resident should demonstrate an understanding of, and the capacity to solve problems in relation to the following:
 - a) Imaging equipment radiation physics and safety
 - b) Diagnostic arteriography, venography and CT angiography
 - c) Guide wire and catheter skills
 - d) Percutaneous vascular access including the use of ultrasound to aid in access
 - e) Percutaneous transluminal angioplasty
 - f) Intravascular stents
 - g) Pharmacological and mechanical thrombolytic therapy
 - h) Stent graft for endovascular repair of aortic aneurysms
 - i) Coil embolization to facilitate endovascular aortic aneurysm repair
 - j) Closure of percutaneous access sites
 - k) Accepted intra-arterial and intra-caval devices.

2. The residents should demonstrate cognitive understanding of patient care problems in in-patients undergoing endovascular procedures and develop effective and ethically sound diagnostic and therapeutic skills to manage these problems. The core skills include:
 - a) Percutaneous vascular access via femoral and brachial arterial approaches including the use of ultrasound to aid in access
 - b) Diagnostic arteriography of all peripheral vascular vessels including carotid/vertebral artery, renal/mesenteric, aorto-iliac and upper and lower extremity vessels.

- c) Percutaneous transluminal angioplasty and stenting of peripheral arterial lesions for which this is accepted therapy.
- d) Endovascular repair of abdominal aortic aneurysm repair.
- e) Coil embolization to facilitate endovascular aortic aneurysm repair
- f) Catheter directed and/or mechanic thrombolysis.
- g) Percutaneous access via femoral, jugular, upper extremity (eg. AVF) venous approaches including the use of ultrasound to aid in difficult access
- h) Caval filter placement for venous thromboembolism

COMMUNICATOR

The resident will learn to establish effective relationships with patients, radiologists, and other health professionals. Communication skills are essential for the functioning of a vascular surgeon, and are necessary for obtaining information from, and conveying information to patients and their families. Furthermore, these abilities are critical in eliciting patients' beliefs, concerns, and expectations about their illnesses, and for assessing key factors impacting on patients' health.

Requirements

- Establish therapeutic relationships with patients that are characterized by understanding, trust, respect, empathy and confidentiality.
- Elicit and synthesize relevant information from the patient, their family, and/or community about his/her problem, while considering the influence of factors such as the patient's age, gender, ethnic, cultural and socioeconomic background, and spiritual values on that illness.
- Discuss appropriate information with the patient and his/her family, and effectively communicate this information with other health care providers that facilitates optimal health care of the patient.

COLLABORATOR

The resident will learn to work in partnership with radiologists, vascular surgeons and other health care professionals who are appropriately involved in the care of individuals or specific groups of patients.

Requirements

- Consult effectively with other physicians and health care professionals.
- Contribute effectively to other interdisciplinary team activities.

MANAGER

The resident will learn to function as managers in the interventional radiology suite. They need to be familiar with the entire inventory in the radiology suite,

how various equipments and products work together, consignment products versus purchased products, prices of the products and various alternative products. The resident should be able to draft up a list of essential inventory based on the resources they have in the future practice.

Requirements

- Allocate finite health care and health education resources effectively.
- Participate in planning of an endovascular program.
- Effectively utilize information technology such as literature searches and vascular databases to optimize patient care, continued self-learning, and other activities
- Utilize time and resources effectively in order to balance patient care, earning needs, outside activities, and personal life.

HEALTH ADVOCATE

The vascular resident will learn to recognize the importance of advocacy activities in responding to the challenges represented by those social, environmental, and biological factors that determine the health of patients and society. They recognize advocacy as an essential and fundamental component of health promotion that occurs at the level of the individual patient, the practice population, and the broader community. Health advocacy is appropriately expressed both by the individual and collective responses of vascular surgeons in influencing public health and policy.

Requirements

- Identify the risk factors and other determinants of health that affect a patient with vascular diseases, so as to be able to effectively contribute to improving individual and societal health in Canada.
- Recognize and respond to those issues, settings, circumstances, or situations in which advocacy on behalf of patients, professions, or society are appropriate.
- Be knowledgeable about the local resources that are available for patient management, support and rehabilitation to improve their physical, and emotional well being.

SCHOLAR

Vascular surgeons engage in a lifelong pursuit of mastery of their domain of professional expertise. They recognize the need to be continually learning and model this for others. Through their scholarly activities, they contribute to the appraisal, collection, and understanding of health care knowledge, and facilitate the education of their students, patients, and others.

Requirements

- Develop, implement, and document a personal continuing education strategy.
- Apply the principles of critical appraisal to sources of medical information by incorporating a spirit of scientific enquiry and use of evidence into clinical decision-making.
- Demonstrate the ability to select an appropriate question, efficiently search for and assess the quality of evidence in literature and to keep up to date with the evidence-based standard of care for the conditions most commonly seen in his/her vascular practice.

PROFESSIONAL

The Vascular residents will learn to deliver highest quality care with integrity, honesty and compassion; exhibit appropriate personal and interpersonal professional behaviours; and practice medicine ethically consistent with the obligations of a physician.



UBC Division of Vascular Surgery

3. RESEARCH ROTATION GOALS AND OBJECTIVES FOR SENIOR VASCULAR RESIDENTS

Introduction

The research is an important part of the practice of vascular surgery. During this time, residents will learn how research can impact and improve clinical practice. The objectives for this rotation are: (1) to understand what constitutes good research, (2) how to formulate research questions, (3) learn scientific methodology, (4) avoid pitfalls in research design, and (5) deal with the obstacles commonly encountered during research. The program does not expect residents to become expert researchers.

The research rotation allows residents to gain in depth knowledge of the study subject. They will acquire skills in literature search and critical appraisal, and develop collaborative relationships with basic scientists, statisticians, and quality assurance personnel. They will also acquire skills in biostatistics, presentations methods and research paper writing.

Since research is an important part of academic practice, the resident will gain insight into their future career path with regard to academic versus non-academic practice. The broad aim of the Research Rotation is to introduce to the trainee the scientific rationale of modern vascular surgery

MEDICAL EXPERT/CLINICAL DECISION-MAKER

- Demonstrate cognitive understanding of current state of basic science and clinical practice in vascular surgery and how advances in the former may impact the latter.
- Demonstrate ability to define and understand the following concepts
 - Hypothesis generation
 - Hypothesis testing
 - Research design
 - Bias and its elimination
 - Statistical analysis including power, life table analysis
 - Quality of life analysis
 - Pre-clinical study design
- Demonstrate understanding of vascular anatomy, physiology, and pathophysiology of the circulatory system in health and disease, including

arterial wall and cell biology, hemodynamics, and ischemia-related organ dysfunction.

- Demonstrate understanding of biostatistics and epidemiology as they relate to vascular surgery.
- Demonstrate understanding of the differing patterns of disease, natural history, and responses to treatment of vascular disease in men and women and in different racial and cultural groups.

Demonstrate an understanding of the following:

- Aneurysms of the aorta and other vessels
- Chronic lower extremity arterial occlusive disease
- Acute and chronic visceral ischemia including renal artery occlusive disease
- Extracranial cerebrovascular disease
- Intrathoracic non-coronary vascular disease
- Chronic upper extremity occlusive disease
- Thoracic outlet syndrome
- Acute arterial occlusion.
- Local and systemic complications of vascular therapy.
- Vascular trauma
- Aortic dissections
- Venous thromboembolic disease
- Chronic venous diseases
- Lymphedema
- Amputations
- Endovascular therapy
- Risk stratification and risk factor modification in vascular disease
- Coagulation disorders
- Vasospastic disorders
- Non-atherosclerotic vascular disease
- Arterial venous malformations
- Hemoaccess
- Noninvasive and invasive diagnosis and radiation safety
- Biological and synthetic grafts and complications.

COMMUNICATOR

The resident will learn to facilitate good research by establishing effective relationships and communicate effectively with multiple personnel including research subjects, hospital quality assurance staff, other researchers, bioethics board and funding agencies. Development of communication skills will be facilitated by proposal writing, meetings and discussion of ideas, paper writing and formal presentations.

COLLABORATOR

Research projects are often team efforts involving multiple experts including, health care professionals as well as specific technology experts in quality assurance, biostatistics and basic science. The vascular resident will learn to contribute or lead effectively as a team member in carrying out the research project(s).

MANAGER

The research resident will learn to allocate finite research resources and wisely; utilize time and resources effectively to balance research needs, learning needs, and outside activities; work effectively and efficiently in a health care organization; effectively utilize information technology such as literature searches and vascular databases to optimize research project design, implementation and continued self-learning

HEALTH ADVOCATE

The research resident will learn to recognize the importance of advocacy activities in responding to the challenges represented by those social, environmental, and biological factors that determine the health of patients and society. The resident will recognize advocacy as an essential and fundamental component of health promotion that occurs at the level of the individual patient, the practice population, and the broader community. Health advocacy is appropriately expressed both by the individual and collective responses of vascular surgeons in influencing public health and policy.

SCHOLAR

The resident will develop, implement and monitor a personal continuing education strategy. The resident will contribute to development of new knowledge through research projects. The resident will learn to apply the principles of critical appraisal to sources of medical information by incorporating a spirit of scientific enquiry and use of evidence into clinical decision making. The resident will demonstrate the ability to select an appropriate question, efficiently search for and assess the quality of evidence in literature and to keep up to date with the evidence-based standard of care for the conditions most commonly seen in vascular practice.

PROFESSIONAL

The research resident will learn to conduct research with integrity and honesty. The resident will learn ethical issues surrounding specific research through discussions with project supervisor and formal submission to the research ethics board of UBC.



UBC DIVISION OF VASCULAR SURGERY

4. GOALS AND OBJECTIVES FOR EXTERNAL ROTATION IN NON INVASIVE VASCULAR DIAGNOSIS FOR SENIOR VASCULAR RESIDENTS

1. To understand methods of duplex ultrasound of the vascular system including: Cerebrovascular, abdominal vascular, venous and peripheral arterial.
2. To be able to accurately interpret duplex ultrasound test results of the vascular system including: Cerebrovascular, abdominal vascular, venous and peripheral arterial.
3. To understand the hemodynamic basis of non-invasive vascular diagnosis.
4. To supplement knowledge of noninvasive vascular testing
5. To be able to establish and medically supervise a noninvasive vascular laboratory.

Site:

Rotations will be done for one week at an external university affiliated Vascular center in Canada or the USA. Rotations will be supervised by Royal College or American Board certified Vascular Surgeons.

UBC fellows travel to the Oregon Health Sciences University in their senior year to undertake this training.

Clinical Encounter Rating Scales

RESIDENT

DATE:

Please circle the number corresponding to the residents' performance and return completed form to Nicky. Fax 604-875-4030

Establishes Therapeutic Relationship (Com,Prof) 1 2 3 4
For independant practice

History – Elicits Relevant Information (Exp,Com) 1 2 3 4
For independant practice

History – Explores Relevant Determinants of Health (Exp, Adv) 1 2 3
unacceptable inadequate barely adequate
adequateoutstanding
For independant practice

Physical Examination – Respect For Patient Dignity (Prof) 1 2 3 4
unacceptable inadequate barely adequate
adequateoutstanding
For independant practice

Physical Examination Appropriately 1 2 3 4
For independant practice

Knowledge Required To Focus Assessment Of Patient Problem (Exp,Man) 1 2 3
Unacceptable inadequate barely adequate
adequateoutstanding
For independant practice

Communication Skills_(com) 1 2 3 4
For independant practice

Time Management (man) 1 2 3 4
For independant practice

Investigations - Use of Resources (man, adv) 1 2 3
For independant practice

Interpretation Of Test Results (exp) 1 2 3 4
For independant practice

Management Plan – Appropriate Use Of Consultants and Other Health Care Staff (Exp, Coll, Man) 1 2 3 4
adequate adequate outstanding unacceptable inadequate barely
For indepe

Management Plan – Appropriate Involvement Of Referring MD (coll)	1	2	3	4
adequateoutstanding	unacceptable	inadequate	barely adequate	
			For independant practice	

Response To Patient Concerns/Wishes (prof, com, adv)	1	2	3	4
adequateoutstanding	unacceptable	inadequate	barely adequate	
			For independant practice	

Management Plan – Overall_(exp)	1	2	3	4
			For independant practice	

Post-Encounter Oral Presentation:	1	2	3	4
			For independant practice	

Knowledge (exp)	1	2	3	4
			For independant practice	

Judgment (exp, man, adv)		1	2	3
			For independant practice	

Communication with Observer_(com,prof)		1	2	3
			For independant practice	

COMMENTS (Please make comments on both good and bad aspects of resident performance):

OVERALL GLOBAL SCALE

On this encounter, how would you rate this

4 5

Residents' overall performance

adequate outstanding

1

unacceptable

2

inadequate

3

barely adequate

For independent practice

Surgeons' Signature

GLOBAL RATING SCALE OF OPERATIVE PERFORMANCE – DAILY EVALUATION

Name of Resident:

Date:

Please circle the number corresponding to the residents'/fellows' performance regardless of the residents'/fellows' level of training.

PLEASE COMPLETE THIS FORM DAILY AND RETURN TO NICKY Fax 604-875-4036

Respect for tissue

1	2	3	4	5
Frequently used unnecessary force on tissue or caused damage by inappropriate use of instruments		Careful handling of tissue but occasionally caused inadvertent damage		Consistently handled tissue appropriately with minimal damage to tissue

Time and motion

1	2	3	4	5
Many unnecessary moves		Efficient time/motion but some unnecessary moves		Clear economy of movement and maximum efficiency

Instrument handling

1	2	3	4	5
Repeatedly makes tentative or awkward moves with instruments through inappropriate use		Competent use of instruments but occasionally appeared stiff or awkward		Fluid movements with instruments and no stiffness or awkwardness

Knowledge of Instruments

1	2	3	4	5
Frequently asked for wrong instrument or used inappropriate instrument		Knew names of most instruments and used appropriate instrument		Obviously familiar with instruments and their names

Flow of Operation

1	2	3	4	5
Frequently stopped operating and seemed unsure of next move		Demonstrated some forward planning with reasonable progression of procedure		Obviously planned course of operation with effortless flow from one move to the next

Use of Assistants (if applicable)

1	2	3	4	5	NA
Consistently placed assistants poorly or failed to use assistants		Appropriate use of assistants most of the time		Strategically used assistants to the best advantage at all times	

Knowledge of Specific Procedure

1	2	3	4	5
Deficient knowledge. Required specific instruction at most steps of operation		Knew all important steps of operation		Demonstrated familiarity with all steps of the operation

OVERALL PERFORMANCE

1
Very poor

2

3
Competent

4

5
Clearly superior

QUALITY OF FINAL PRODUCT

1
Very poor

2

3
Competent

4

5
Clearly superior

COMMENTS: Please use reverse.

Three things this resident did well today:

Three things that need improvement:

General Comments

Specific Suggestions for Improvement

Surgeons' Signature

Journal Club Evaluation

Please circle the number corresponding to the Resident's performance.

RESIDENT

DATE:

Please return to Nicky at : fax 604-875-4036

Clearly Presents Summary of Article

1 2 3 4 5
unacceptable inadequate barely adequate adequate outstanding

Accurately Highlights Statistical / Clinical Issues related to the Article

1 2 3 4 5
unacceptable inadequate barely adequate adequate outstanding

Knowledgeable of Literature in the Field

1 2 3 4 5
unacceptable inadequate barely adequate adequate outstanding

Appropriately Describes Impact of this Article in the Field

1 2 3 4 5
unacceptable inadequate barely adequate adequate outstanding

Responds to Audiences Questions Appropriately

1 2 3 4 5
unacceptable inadequate barely adequate adequate outstanding

COMMENTS

Surgeons Signature: _____