UBC General Surgery Residency Program

UBC General Surgery Divisional Retreat
July 8, 2013

Adam Meneghetti, MD, MHSc
Director, General Surgery Residency Program
University of British Columbia
Welcome to a new academic year
A responsive administrative structure
Program organization: The Master Schedule
Rotations report
The creation of longitudinal curricula
Better evaluation strategies
Preparation for the Royal College Survey
  Logistical details
  Response to previous deficiencies
  Input from the Division
New program directors and future directions
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CONGRATULATIONS!

2013 Royal College Exam

Division of General Surgery
University of British Columbia
May 9, 2013
CONGRATULATIONS!

UBC General Surgery’s new generation

Excellent surgeons

CaRMS Match 2013

Alexandra Choi
McMaster University

Dimitrios Coutsinos
McGill University

Paul D’Alessandro
Dalhousie University

Kristin DeGirolamo
University of British Columbia

Amandeep “Anu” Ghuman
University of British Columbia

Hamid Izadi
University of Toronto

Nazgol Seyednejad
University of British Columbia

Humaid AlAdawi (VISA)

Carla Pajak
Welcome to a new academic year

**A responsive administrative structure**

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<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Adam Meneghetti</td>
<td>Program Director</td>
</tr>
<tr>
<td>Ahmer Karimuddin</td>
<td>Associate Program Director</td>
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<tr>
<td>Tracy Scott</td>
<td>Assistant Program Director</td>
</tr>
<tr>
<td>Stephen Chung</td>
<td>Research Director</td>
</tr>
<tr>
<td>Eleni Tsakumis</td>
<td>Program Manager</td>
</tr>
<tr>
<td>Heather Cheadle</td>
<td>Senior Program Assistant</td>
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</tbody>
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A responsive administrative structure
ORGANIZATIONAL STRUCTURE OF THE RESIDENCY PROGRAM

- **REC Executive Committee**
  - Meets monthly
  - Enacts policy
  - Monitors residents
  - Promotions
  - Coordinates rotations
  - Drafts curriculum

- **REC General Committee**
  - Meets quarterly
  - Drafts policy
  - Monitors residents
  - Monitors rotations
  - Represents all services

- **Residency Program**
  - Quarterly Town Halls
  - Meets before REC
  - Drafts policy
  - Identifies issues
  - Additional private retreat
  - Additional Whistler retreat

- **Curriculum Committee**
  - Preblock Meetings
  - drafts G and Os for AHDs
  - Develops content
  - Coordinates with staff
  - Jr and Sr AHDs
  - Journal clubs (EBRS)
A responsive administrative structure
CREATIVITY AND COMMUNICATION

Annual Residents’ Retreat
April 12-14, 2013
Whistler, B.C.

Topic: Trauma Surgery
Welcome to a new academic year
A responsive administrative structure

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The Master Schedules for junior and senior residents are the Program’s central documents. Please print, post and refer to them often. They are also on the Program’s website:

http://gsresidency.surgery.med.ubc.ca/
## Curriculum highlights

<table>
<thead>
<tr>
<th>R1</th>
<th>CRASH Course (including ATLS, FCCS, SRAT, POEM Courses)</th>
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</thead>
<tbody>
<tr>
<td>R2</td>
<td>Research elective</td>
</tr>
<tr>
<td></td>
<td>Endoscopy Curriculum</td>
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<tr>
<td>R3</td>
<td>Leadership Symposium (planned)</td>
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<tr>
<td></td>
<td>Fundamentals of Laparoscopic Surgery Course</td>
</tr>
<tr>
<td>R4</td>
<td>SAGES Courses</td>
</tr>
<tr>
<td>R5-6</td>
<td>Definitive Trauma Surgery Course (DSTC)</td>
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<tr>
<td></td>
<td>Board Review Courses</td>
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Rotations

- Trauma
- ACS
- HPB/Transplant
- Surgical Oncology
- MIS

St. Paul’s
- Colorectal
- Endocrine

BC Children’s
- Royal Columbian

Mount St. Joseph

Surrey Memorial

Lions Gate, West Vancouver

Nanaimo

Prince George

Cranbrook

Williams Lake

Royal Jubilee, Victoria

Burnaby

Kamloops

Vernon

Campbell River

Langley
Refinements to the main teaching sites have impacted education and patient care

- Acute Care Surgery restructure at VGH
- Better staffing on HPB
- A third teaching service at SPH
- A second teaching service and more formalization at RCH
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Longitudinal curricula

Endoscopy

**Phase 1**  
R2 simulation curriculum developed by Bradley and Karimuddin  
Minimum # of sims: 30

**Phase 2**  
Dedicated endoscopy rotation (RGH, SPH, Victoria)

**Phase 3**  
Dedicated endoscopy times across numerous senior rotations (RCH, SPH, Victoria, PGRH, LGH, Kamloops etc.)  
DOPS evaluations
**Longitudinal curricula**

**Diagnostic imaging**

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>R1 CRASH Course U/S curriculum developed by the American College of Surgeons</th>
</tr>
</thead>
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<tr>
<td>Phase 2</td>
<td>R3 Emergency Trauma Diagnostic Imaging Rotation (U/S, CT, Abdo/IR)</td>
</tr>
<tr>
<td>Phase 3</td>
<td>R3-4 use of U/S on Trauma and ACS rotations (portable U/S purchased and in use) Validation strategies in place (Trauma Radiology Rounds, ACS weekly Rounds)</td>
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</tbody>
</table>
Longitudinal curricula

Global health

Phase 1
Exposure to issues in global surgery at AHD, research presentations, etc.

Phase 2
Preparation for and participation in local and international academic electives in low resource settings

Phase 3
Pursuit of a graduate level training (UBC Branch for International Surgery) – courses or degree program
Longitudinal curricula

Research / leadership

ZARGARAN, ZERHOUNI, KANJI, HOLLETT, CHAN
UBC CLINICAL INVESTIGATOR PROGRAM
AWARDS

5 current award holders
Longitudinal curricula

Research / leadership

| Phase 1          | R1 exposure to research methods (CRASH Course)  
|                  | Mentored selection of research projects and programs |
| Phase 2          | R2 Research Block – S. Chung Service Chief  
|                  | R2 presentation of research proposal at RRD |
| Phase 3          | Independent projects x 2  
|                  | Consider application for UBC Clinical Investigator Program |
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### A matrix for comprehensive surgical education

The matrix provides a framework that illustrates at a glance where programs are addressing educational priorities across the CanMEDS spectrum. The formal academic curriculum and clinical rotations (light shading) can be used to address all CanMEDS roles. However, individual rotations can serve as hubs for individual CanMEDS roles depending on their areas of expertise and case-mix. Such CanMEDS hubs expand their formal goals and objectives, evaluations and educational content to advance expertise in their CanMEDS area of specialization. Longitudinal programs such as the Surgical Residents as Teachers Program provide a more sustained and longitudinal exposure to CanMEDS roles as a primer for life long commitment to growth in these areas. These educational initiatives must be accompanied by evaluations that fit in to a parallel assessment framework. We believe that not all CanMEDS roles need formal teaching in all contexts, but rather surgical programs can tailor CanMEDS initiatives according to their individual strengths. The main priority is to have at least some legitimate shading in every column.
The Operative Dashboard
Exams

- Regular written exams for juniors and seniors
- Rotation oral exams (Victoria, RGH)
- Royal College Mock Oral Exams (first successfully completed June, 2013)
- Expert Series
**MEDICAL EXPERT**

**Written / Oral Exams**
- Graph showing progression from 0 to 100%

**Rotation evaluations**

**MISTELS modules completed**
- Bar graph showing modules completed

**Suturing competition**
- Graph showing progression from 600 to 0

**GRITS Numbers**
- Bar chart showing numbers

**OPERATIVE CASE LOG**
- Graph showing case log progression

**MEDICAL ADVOCATE**

**Advocacy**
- Trauma access project complete

**SCHOLAR**

**SRAT modules**
- Chart showing modules completed

**HEALTH ADVOCATE**

**COLLABORATOR**

**LEADERSHIP**
- TTL pass
- CRM pass
- CHIEF

**MANAGER**

**Informed consent**
- Score: 77

**Operative dictations**
- Score: 91
Resident completes a clinical activity and logs it on the M/D app. Resident invites a staff surgeon to complete one of 25 "metrics".

The staff surgeon is prompted by the M/D app, and a training metric is evaluated at the point of experience.

The metric score and comments are uploaded to the MATRIX database.

The MATRIX exports metrics to a Dashboard, providing real-time display of volume of experience and attainment of competency.

The Dashboard is used by service chiefs to create individualized learning plans and to populate periodic In-Training Evaluation Reports.

The MATRIX/Dashboard

Metrics for the MATRIX
Staff responsibilities

- Complete midterm evaluations
- Complete end of rotation evaluations in a timely fashion
- Ask for and complete GRITS forms
- Consider completing a rotation oral examination
- Come to the AHDs and exams when you can
OVERVIEW

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New program directors and future directions
Preparation for the Royal College Survey

Logistical details

• Date: November 18 – 22, 2013
• Please mark your calendars
• Submit your CV and other documents
• Please review program materials in advance
• Please review and address your rotation evaluations
• Think of how you want the program to evolve
• Attend your scheduled meeting (REC, staff, residents) on the day
Preparation for the Royal College Survey

Response to deficiencies

| 6 deficiencies | Program responses, implemented over the past 6 years |
Response to deficiencies 1

*Residency Program Committee not always responsive in a timely fashion to some resident concerns*

Town Hall Meetings (4/year)
All R levels represented on REC (4/year)
Actionable REC minutes
Residents’ Retreat (1/year)
Whistler Retreat (1/year)
Website and Twitter feed (ongoing)
Open door policy from PD and manager
Response to deficiencies 2

Faculty involvement in Academic Half Day

Junior and senior split AHDs
Less interruptions by clinical duties
Block structure
Prescribed readings
Greater emphasis on surgical anatomy (residents’ request)
Integrated curriculum highlights (CRASH, SRAT, ATLS, FCCS, POEM, FLS, DSTC)
Curriculum Committee
Full simulation curricula in both Jr and Sr AHDs
Regular written and oral exams
Preparation for the Royal College Survey

Response to deficiencies 3

*CanMEDS Roles Manager, Health Advocate not well done*

**MANAGER**
Time management lecture / curriculum (Physicians’ Health Plan)
CRASH Course experiences: ATLS, Perioperative Emergency Management (POEM)
Dedicated rotations: SPH Junior, Trauma Senior, ACS Senior
Leadership Symposium (Garraway, planning stages)
Transition to practice seminar / BCMA session (protected) / PGME session

**HEALTH ADVOCATE**
CRASH Course lectures (multidisciplinary care in orthopedic trauma)
Dedicated rotations: Trauma Junior, SPH Senior
Global Health Scholars Curriculum
Preparation for the Royal College Survey

Response to deficiencies 4

*Resident evaluations not always timely or done face to face*

More engagement by Service Chiefs

Implementation of **GRITS** forms for face to face evaluation of operative skills

Mandated midterm and exit evaluations and GRITS reviews

Creation of REC Executive Committee and Annual Promotions Meetings

Creation of Operative and Global Dashboards to document performance
Preparation for the Royal College Survey

Response to deficiencies 5

*Service responsibilities on one particular rotation can interfere with ability of residents to attend AHD and negatively impact on resident morale*

Better staffing of HPB

Separation of call duties – no or minimal GS call for HPB residents

Split Academic Half Days to ensure protected time and clinical coverage

Creation and refinement of the Acute Care Surgery Service:

- Morning Report for handover and teaching
- iPad-based review of clinical cases
- Weekly Service and Radiology Rounds
- Incorporation of U/S
- Protected OR time
- Unprecedented staff involvement
Preparation for the Royal College Survey

Response to deficiencies 6

Limited hands on surgical exposure for PGY1s and PGY2s

Re-written rotation and level of training specific goals and objectives
Expected operations for all levels specified
Routine operative simulation in CRASH and AHDs
Fundamental Laparoscopic Skills Course
Endoscopy simulation curriculum
GRITS forms as an incentive to take and give operative independence
Regular reviews of operative dashboards
R1 Operative Surgery Rotation (RCH, Campbell River, Langley)
Greater inclusiveness among staff surgeons at VGH and SPH
Can Meds 2015

• introducing a new element – Milestones - within each Role of the existing framework

• integrating new content and themes (such as patient safety) within each Role

• creating new faculty development and resource tools to support these changes
Resident Duty Hours

• National Steering Committee on Resident Duty Hours (RCPSC)

• *Towards a Pan-Canadian Consensus on Resident Duty Hours* project (Fatigue, Risk and Excellence June 2013)
Recommendations

• All residency education programs should be required to develop a Fatigue Risk Management Plan (FRMP) for residents.

• Infrastructure should be created and implemented by residency programs to support fatigue risk management as a routine practice through the creation of monitoring and enforcement mechanisms.

• A national tool-box of fatigue mitigation strategies and techniques should be created. These should be adaptable in a variety of settings and for a variety of disciplines.
Thank You