Comparison of the Training Paradigms – Integrated and Traditional

SELECT A SPEAKER BELOW TO SKIP DIRECTLY TO THE PRESENTATION
(SCROLL TO THE TOP OF THE DOCUMENT TO RETURN TO THIS PAGE)

Fellowships – SWOT Analysis
Erica Mitchell, MD, Oregon Health & Science University, Portland, OR

Integrated Programs – SWOT Analysis
Jason T. Lee, MD, Stanford University Medical Center, Stanford, CA

Interactions Between Specialties
Vikram Kashyap, MD, University Hospitals Case Medical Center, Cleveland, OH

Integrating into the Parent Program
David Rigberg, MD, UCLA Medical Center, Los Angeles, CA

ABSTRACT: Open Abdominal Surgical Training Differences Experienced By Integrated Vascular and General Surgery Residents
Adam Tanious, MD, Mathew Wooster, MD, Andrew Jung, BA, Peter Nelson, MD, and Murray Shames, MD, University of South Florida Morsani, Tampa, FL

Contracting or Expanding Your Program
J Gregory Modrall, MD, University of Texas Southwestern Medical School Program, Dallas, TX

Start Date Considerations and the Impact on Trainees
Matthew Eagleton, MD, The Cleveland Clinic Foundation, Cleveland, Ohio
Comparison of the Training Paradigms- Integrated & Traditional Fellowships-SWOT Analysis
# Background

<table>
<thead>
<tr>
<th>Training Paradigm</th>
<th>Number of Programs in the Nation 2014-2015</th>
<th>Number of Graduating Residents in the Nation 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>5+2</td>
<td>96</td>
<td>130</td>
</tr>
<tr>
<td>0+5</td>
<td>23</td>
<td>26</td>
</tr>
<tr>
<td>Training Paradigm</td>
<td>Number of Programs in the Nation</td>
<td>Programs</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>0+5</td>
<td>8</td>
<td>Grand Rapids, Maine Med Ctr, McGaw Med Ctr, Med U S. Carolina, Penn State, SIU, U Maryland, UMass</td>
</tr>
<tr>
<td>5+2</td>
<td>58</td>
<td>OHSU, UT South Western &amp; U. Virginia</td>
</tr>
<tr>
<td>5+2 &amp; 0+5</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>4+2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Strengths/Weakness

2016 Fellowship Match Trends for Vascular Surgery
Strengths/Weakness

2016 Fellowship Match Trends for Vascular Surgery
### Strengths/Weakness

2016 Fellowship & Integrated Resident VSITE Scores

<table>
<thead>
<tr>
<th>Subtest</th>
<th># Items</th>
<th>Average Score (Tot Grp)</th>
<th>Average Score (5+2)</th>
<th>Average Score (0+5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>TOT (529)</td>
<td>L1 (121)</td>
<td>L2 (124)</td>
</tr>
<tr>
<td>TOTAL TEST</td>
<td>243</td>
<td>71</td>
<td>71</td>
<td>76</td>
</tr>
<tr>
<td>Arterial</td>
<td>88</td>
<td>72</td>
<td>71</td>
<td>77</td>
</tr>
<tr>
<td>Venous</td>
<td>17</td>
<td>68</td>
<td>66</td>
<td>71</td>
</tr>
<tr>
<td>Angio Access</td>
<td>6</td>
<td>75</td>
<td>74</td>
<td>77</td>
</tr>
<tr>
<td>Trauma</td>
<td>14</td>
<td>64</td>
<td>66</td>
<td>71</td>
</tr>
<tr>
<td>Complications</td>
<td>10</td>
<td>68</td>
<td>65</td>
<td>72</td>
</tr>
<tr>
<td>Endovascular Therapy</td>
<td>5</td>
<td>62</td>
<td>63</td>
<td>73</td>
</tr>
<tr>
<td>Vascular Applied Science</td>
<td>19</td>
<td>67</td>
<td>64</td>
<td>70</td>
</tr>
<tr>
<td>Vascular Laboratory</td>
<td>18</td>
<td>72</td>
<td>69</td>
<td>74</td>
</tr>
<tr>
<td>Miscellaneous Vascular**</td>
<td>9</td>
<td>82</td>
<td>83</td>
<td>85</td>
</tr>
<tr>
<td>Total Vascular Surgery</td>
<td>186</td>
<td>71</td>
<td>69</td>
<td>75</td>
</tr>
<tr>
<td>Total Core Surgery</td>
<td>57</td>
<td>74</td>
<td>77</td>
<td>77</td>
</tr>
</tbody>
</table>
Strengths/Weakness

2016 Fellowship VSITE Scores

'5 + 2' Residents

Frequency

Percent Correct
Strengths/Weakness

2016 VSITE Integrated Scores

'0 + 5' Residents

Frequency
0 5 10 15 20 25 30

Percent Correct
0 20 40 60 80 100
### Strengths/Weakness

#### Relationship between VSITE Scores & VS QE Performance (2015)

<table>
<thead>
<tr>
<th>2015 VSITE Percent Correct Score</th>
<th># Fail 2015 VS QE</th>
<th># Pass 2015 VS QE</th>
<th>Total 2015 VS QE</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>62</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>63</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>64</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>65</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>67</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>68</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>69</td>
<td>1</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>70</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>71</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>72</td>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>73</td>
<td>0</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>74</td>
<td>1</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>75</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>76</td>
<td>0</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>77</td>
<td>1</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>78</td>
<td>0</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>79</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>80</td>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>81</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>82</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>84</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>85</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>86</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL:** 6 (4.5%) failures, 128 (95.5%) passes, 134 (100%) total attempts.

- VS QE fails had lower VSITE scores (all but one had below average VS ITE scores).
- No examinees with high VS ITE scores failed the VS QE.
Strengths/Weakness

Relationship between VSITE Scores & VS QE Performance (2015)

<table>
<thead>
<tr>
<th>2015 VSITE Percent Correct Score</th>
<th># Fail 2015 VS QE</th>
<th># Pass 2015 VS QE</th>
<th>Total 2015 VS QE</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>62</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>63</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>64</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>65</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>67</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>68</td>
<td>1</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>69</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>70</td>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>71</td>
<td>0</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>73</td>
<td>1</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>74</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>75</td>
<td>0</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>76</td>
<td>1</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>77</td>
<td>0</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>78</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>79</td>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>80</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>81</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>82</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>84</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>85</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>86</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>6 (4.5%)</strong></td>
<td><strong>128 (95.5%)</strong></td>
<td><strong>134 (100%)</strong></td>
</tr>
</tbody>
</table>

VS QE fails had lower VSITE scores (all but one had below average VS ITE scores).

No examinees with high VS ITE scores failed the VS QE.
### Strengths/Weakness

**Total Experience of Residents Completing Programs in 2014-2015**

<table>
<thead>
<tr>
<th>RRC Area</th>
<th>RRC Procedure</th>
<th>Natl 5+2 Avg N=130</th>
<th>Natl 0+5 Avg N=26</th>
<th>Surg Chief</th>
<th>Surg Junior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aneurysm-Repair</strong></td>
<td>Open Rep Infrarenal A-I Aneur, Rupt</td>
<td>2.7</td>
<td>1.5</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Open Rep Infrarenal A-I Aneur, Elect</td>
<td>8.6</td>
<td>5.2</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Endovas Rep Abd Aort/Iliac Aneur</td>
<td>46.6</td>
<td>27.8</td>
<td>24.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Endovas Rep Thora Aortic Aneurysm</td>
<td>14.1</td>
<td>0.2</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal - Aneurysm Repair</strong></td>
<td></td>
<td>87.3</td>
<td>52.0</td>
<td>41.5</td>
<td></td>
</tr>
<tr>
<td><strong>Cerebrovascular</strong></td>
<td>Carotid Endarterectomy</td>
<td>48.5</td>
<td>25.1</td>
<td>26.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reop Carotid Surg</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transcath Place Carotid Artery Stent</td>
<td>8.0</td>
<td>3.6</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cervical Bypass Aortic Arch Branches</td>
<td>5.3</td>
<td>3.9</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal - Cerebrovascular</strong></td>
<td></td>
<td>67.5</td>
<td>34.8</td>
<td>35.9</td>
<td></td>
</tr>
</tbody>
</table>
## Strengths/Weakness

### Total Experience of Residents Completing Programs in 2014-2015

<table>
<thead>
<tr>
<th>RRC Area</th>
<th>RRC Procedure</th>
<th>Natl 5+2 Avg</th>
<th>Natl 0+5 Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Surg Chief</td>
<td>Surg Junior</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Periph-Obstruct</strong></td>
<td>Translum balloon angio aorta or iliac</td>
<td>15.0</td>
<td>7.3</td>
</tr>
<tr>
<td></td>
<td>Femoral, Profunda Endarterectomy</td>
<td>13.5</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>Femoral-Popliteal Bypass, Vein</td>
<td>10.1</td>
<td>5.2</td>
</tr>
<tr>
<td></td>
<td>Translum balloon angio femoral-popl</td>
<td>27.7</td>
<td>12.3</td>
</tr>
<tr>
<td></td>
<td>Infrapopliteal Bypass, Vein</td>
<td>15.9</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>Translum ballon angio, tibioperoneal</td>
<td>14.7</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal - Periph Obstruct</strong></td>
<td>175.2</td>
<td>93.1</td>
</tr>
<tr>
<td><strong>Abdominal</strong></td>
<td>Celiac/Sma Endarterect, Bypass</td>
<td>3.8</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>Renal Endarterectomy, Bypass</td>
<td>0.8</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Translum balloon angio, renal</td>
<td>4.1</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal - Abdominal Obstruct</strong></td>
<td>15.1</td>
<td>7.1</td>
</tr>
</tbody>
</table>
## Total Experience of Residents Completing Programs in 2014-2015

<table>
<thead>
<tr>
<th>RRC Area</th>
<th>RRC Procedure</th>
<th>Natl 5+2 Avg</th>
<th>Natl 0+5 Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Surg Chief</td>
<td>Surg Junior</td>
</tr>
<tr>
<td>Upper Extremity</td>
<td>Subtotal - Upper Extremity</td>
<td>14.6</td>
<td>6.1</td>
</tr>
<tr>
<td>Extra-Anatomic</td>
<td>Subtotal - Extra-Anatomic</td>
<td>9.7</td>
<td>6.5</td>
</tr>
<tr>
<td>Thrombolysis/Mech</td>
<td>Subtotal - Thrombol/Mech thrombectomy</td>
<td>12.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Trauma</td>
<td>Subtotal - Trauma</td>
<td>14.1</td>
<td>7.6</td>
</tr>
<tr>
<td>Total Major</td>
<td></td>
<td>402.3</td>
<td>217.1</td>
</tr>
<tr>
<td>Venous</td>
<td>Subtotal- Venous</td>
<td>58.8</td>
<td>28.9</td>
</tr>
<tr>
<td>Endovas-Diag</td>
<td>Subtotal - Endo Diagnostic</td>
<td>104.7</td>
<td>41.2</td>
</tr>
<tr>
<td>Vascular Access</td>
<td>Subtotal - Vascular Access</td>
<td>60.3</td>
<td>23.8</td>
</tr>
<tr>
<td>Amputations</td>
<td>Subtotal - Amputations</td>
<td>28.7</td>
<td>16.3</td>
</tr>
<tr>
<td>Total Minor</td>
<td>Total Minor</td>
<td>268.1</td>
<td>117.5</td>
</tr>
<tr>
<td>Total Operations</td>
<td>TOTAL</td>
<td>881.4</td>
<td>334.5</td>
</tr>
</tbody>
</table>
Strengths

• Ready to operate as soon as they show up
• Well seasoned/mature and enter fellowship prepared for intense and meaningful 2 year experience
• ~ same # cases in 2 years as 0+5 perform in 5 years- more intense experience
• Intensity of training prepares them for intense practice after training
Weaknesses

• 5+2 and 0+5 program:
  – Fellows have to share cases with 0+5 trainees which dilutes training experience

• 0+5 program only:
  – Potentially not engage general surgery residents and therefore potentially decreases future interest in the specialty

• Any 5+2 program:
  – Shorter time period for engagement in meaningful research experience
Opportunities

• ABS and Early Specialization Program (ESP) in surgery
Threats

• Will general surgery residents have less exposure (and interest) in vascular surgery in programs with 0+5 training paradigms?
• What is the fate of the 5+2 program in programs that offer both training paradigms?
Integrated Residency SWOT analysis

Jason T. Lee, MD
Professor of Surgery
Program Director, Vascular Surgery Residency/Fellowship
June 9, 2016
- Popularity
- Quality
- Performance
- Jobs
Growth of Integrated VS programs

- Number of Programs
- Number of Positions
- Number of Applicants

Year: 2007 to 2013

2007: Programs, Positions, Applicants
2008: Programs, Positions
2009: Programs, Positions
2010: Programs, Positions
2011: Programs, Positions
2012: Programs, Positions
2013: Programs, Positions
Growth of Integrated VS programs

2014- 51 positions (71% US filled)
2015- 57 positions (84% US filled)
2016- 56 positions (100% US filled)
An increasing demand for integrated vascular residency training far outweighs the limited supply of positions

Andres Schanzer, MD, Jeff Nahmias, MD, Kathleen Korenda, NP, MBA, Mohammad Eslami, MD, Elias Arous, MD, and Louis Messina, MD, Worcester, Mass

(J Vasc Surg 2009;50:1513-8.)

EDUCATION CORNER

From the Western Vascular Society

A comparison of 0 + 5 versus 5 + 2 applicants to vascular surgery training programs

Mohamed A. Zayed, MD, PhD, Ronald L. Dalman, MD, and Jason T. Lee, MD, Stanford, Calif

Objective: The new integrated 0 + 5 vascular surgery (VS) training paradigm introduced in 2007 required program directors and faculty to reconsider recruiting methods and exposure of medical students to VS. As a means to identify variables important for recruitment of 0 + 5 VS applicants, we sought to analyze national 0 + 5 VS residency application trends and to compare medical school demographics of applicants to both our 0 + 5 residency and 5 + 2 fellowship programs.

Methods: Electronic Residency Application Service and National Resident Matching Program online public databases were queried to evaluate nationwide trends in the number of applicants to integrated VS residency programs between 2007 and 2010. Demographic data from Electronic Residency Application Service applications submitted to our institution’s 0 + 5 and 5 + 2 VS training programs during the same time period were reviewed.

Results: From 2008 to 2011, there were 190 applicants to our 0 + 5 VS residency program and 161 applicants to our 5 + 2 fellowship program, with 127 (66.8%) and 122 (75.8%) being United States medical graduates, respectively.
Survey of the first wave of integrated vascular surgery graduates versus traditional fellows

Colvard B, Shames M, Schanzer A, Rectenwald J, Chaer R, Lee J
Findings

• Integrated and traditional VS graduates are similar
  – case volume
  – research experience
  – number of job offers
  – salaries
  – trend towards integrated graduates taking more academic jobs

• No concerns or warning signs of undertrained, undervalued, or under-recruited integrated VS graduates

• Success in job market essentially equivalent in 2013

• Positive data for applicants and programs interested in developing integrated VS residencies
• Program dropouts
• Workload of educational team
  – 2 trainees in 2007
  – 11 trainees in 2016
• Rotations with GS
• Milestone development
• Educational research/experience for faculty
  – Simulation as a tool
• Optimization of team organization
  – More time to adjust rotations to adjust individual learning
• Fewer open cases
• Uncertain work hour conclusions from FIRST trial
Interactions Between Specialities

Vik Kashyap, M.D., F.A.C.S.
Professor of Surgery
Chief, Division of Vascular Surgery and Endovascular Therapy
Co-Director, Harrington Heart and Vascular Institute

APDVS, April 1, 2016
Interaction vs. Competition

- Interaction between multiple specialties is inherent to our practice in taking care of patients with vascular disease

- The critical question is does this impact resident training
Challenges when Multiple Specialties are Treating Similar Disease Processes

- Autonomy—often competition
- Integration—rare
- Collaboration—?best model
PAD—Endovascular Treatment

1997

2016
Current Status by Disease State

- Cerebrovascular: Neuro-IR, VS, IC, Neuro
- Aortic Disease: VS, CT, IC, IR
- PAD: VS, IC, IR
- Venous Disease: IR, VS, Dermatology, GS, “phlebologists”
- Access: IR, VS, Interventional Nephrology
Why is this happening?
Specialists are filling a void
There is little collaboration
Vascular Center Team
Vascular Surgery Case Volume
There are 107 vascular surgery fellowship programs and 51 vascular surgery integrated residency programs across 40 U.S. states!
Since offering 0+5 programs:
- The amount of total trainees have nearly doubled
- The amount of female trainees has more than quadrupled
Future Solutions

- As the number of vascular surgeons increases, we may get superspecialized
- Experts in cerebrovascular disease, aortic pathologies, PAD, venous disease, etc
- This will allow our specialty to influence the care of more patients
Heart Disease
• Adult Congenital Heart Disease
• Advanced Heart Failure and Transplant Cardiology
• Cardiovascular Disease
• Clinical Cardiac Electrophysiology
• Critical Care Medicine
• Interventional Cardiology

Urology
• Urologic Oncology
• Pediatric Urology
• Female Pelvic Medicine and Reconstructive Surgery
• Urodynamics
• Prostate, kidney, bladder specialists

Neurosurgery
• Neurosurgical Oncology
• Spine
• Movement disorders
• Cerebrovascular
Integrating into the Parent Program

David Rigberg, M.D.
Professor of Surgery
Division of Vascular Surgery
David Geffen School of Medicine at UCLA
Los Angeles, California
As a 0-5 PD, my relationship with my colleagues and PD in general surgery has been adversely impacted since we started our program.
My associated general surgery program treats our 0-5 trainees in the same manner as the categorical general surgery residents with regard to call, scheduling preferences and other issues.
My general surgery colleagues and trainees openly express displeasure/irritation with the decline in vascular cases for the general surgery residents since we started a 0-5 program.
Negatives

- Loss of vascular cases
  - not just from 0-5 program
  - overall trends
- Scheduling hassles
- Hierarchal issues
- “Tude”
  - variable interest in gen surg
  - goes both ways
Solutions

- Loss of cases
  - accurate case counts
  - types of cases available

- “Tude”
  - important for trainee to fit in with GS
  - needs to show interest in GS
  - requires careful eval review...
  - conferences, travel, meetings
Solutions

- Scheduling hassles
  - Know what you need for your trainees
  - Realize non surg rotations complicate...
  - Communicate your needs early
  - Know needs for finances of program
  - Look out for your residents (call, vacation, etc...)
Solutions

Hierarchal Issues
- particularly with research years
- expertise resentment
- gen surg rotations with vasc cases...
- design rotations to minimize this
Benefits

- Program gets (typically) a top notch and heavily sought candidate (vs prelim)
- Vascular “expert” and liaison on service
- Scheduling flexibility at junior level
- Institutional understanding at senior levels
  - similar to taking inside resident...
Final Advice

- Maintain good relationship with GS PD - listen! They may be right...
- Try to be flexible to generate goodwill!!!
- With conflicts, focus on educational needs - Dean’s office can help...
- At the end of the day, it is what it is...
I have the full support of the general surgery program for the 0-5 program.
Division of Vascular Surgery
University of California, Los Angeles

UCLA Ronald Reagan Medical Center
Los Angeles, California
Open Abdominal Surgical Training Differences Experienced By Integrated Vascular And General Surgery Residents

Adam Tanious, MD; Mathew Wooster, MD; Andrew Jung, BA; Peter Nelson, MD; Paul Armstrong, DO; Murray Shames, MD

APDVS
4/1/2016
Conflicts of Interest

• None
IVSR Program Assessment

- Integrated Vascular Surgery Residents (IVSR) and General Surgery Residents (GSR)
  - 2014 - University of South Florida

  - Effect of IVSR on operative experience of Vascular Fellows (VF) and GSR
  - 5% drop in GSR vascular operative volume over the study period


Division of Vascular and Cardiothoracic Surgery
Objectives

1. What is the overall operative experience offered by both the integrated vascular and general surgery residency programs?

2. What is the training experience offered by the IVSR paradigm in open abdominal surgery?

3. How does the open abdominal surgical training experience compare between graduating IVSR and GSR?
Methods

• ACGME National Resident Reports compiled for both graduating IVSR and categorical GSR
  – Between 2012 – 2014
  • 30 IVSR
  • 2203 GSR
Methods

• Open surgery defined by:
  
  – Exposure any visceral organ system (including the aorta its major branches) as reported under the ACGME category of “Area” or “RRC procedures”

  – Calculated total cases performed as Surgeon Chief, Junior, and Secondary cases for vascular and general surgery
“Open Abdominal Procedures (OAP)”

- **Open Aortic Surgery**
  - Aortic Surgery
    - Aneurysm, Obstructive, Trauma
    - Reno-Visceral Revascularization
    - Spine Exposure

- **Open Abdominal Surgery**
  - Alimentary Tract
    - Esophagus, Stomach, Small intestine, Large Intestine
  - Abdominal Surgery
    - General, Liver, Biliary, Pancreas, Spleen
  - Transplant Surgery
  - Trauma
## Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Integrated Vascular</th>
<th>General Surgery</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5-Year Case Volume for Credit</strong></td>
<td>1832 (500)</td>
<td>980 (750)</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>(Required)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Chief Cases - Major</strong></td>
<td>451.6 (Not Required)</td>
<td>239 (150)</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>(Requirements)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5-Year Major Vascular Cases</strong></td>
<td>687 (250)</td>
<td>45 (Not Required)</td>
<td>&lt; .0001</td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Integrated Vascular</th>
<th>General Surgery</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Abdominal Procedures (Open Aortic + Abdominal)</td>
<td>93</td>
<td>192</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td>Percent of Total Case Volume</td>
<td>5.2%</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Integrated Vascular</th>
<th>General Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Contributor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open Abdominal Procedures</td>
<td>Open Aortic 61%</td>
<td>Open Alimentary 60%</td>
</tr>
<tr>
<td>Cases - Major Contributor</td>
<td>57 (93)</td>
<td>116 (192)</td>
</tr>
<tr>
<td>(Total OAP)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Conclusions

• IVSR report almost double the number of total cases during their training
  – Double chief level cases

• Over 50% of open abdominal surgeries performed by IVSR involve the aorta and/or its reno-visceral branches
  – Open Abdominal surgery comprises 5% of IVSR surgical training
Conclusions

- GSR have a far broader scope of OAP, completing nearly double that of IVSR
  - The differences in OAP pertain to the differing pathology treated by GSR and IVSR

- The current IVSR training paradigm offers adequate exposure to Open Aortic Surgery
Thank You

Questions?
Contracting or Expanding Your Program

J. Gregory Modrall, MD
Professor of Surgery and Program Director
The speaker has no relevant disclosures.
Why Contract Your Program?

- Loss of $$
- Loss of Site
- Readjustment of Priorities
- Clinical Volume
Contracting Your Program

Opportunity for program self-assessment

- What are the threats to our program?
- Is our program solid and stable?
- What components are absolute necessities?
- What components are unnecessary?
Why Expand Your Program?

Expansion ALWAYS based on a solid educational rationale, NEVER on service needs.

- Improve educational opportunities
- Add educational flexibility
- Add valuable educational sites
ACGME Program Requirements

Complement Increase

“A sound educational rationale for an increase in complement must be submitted. Documentation of adequate clinical material and complex operative cases, as well as documentation of a quality didactic education, must also be submitted. A clearly outlined block diagram must accompany the request to illustrate the proposed clinical assignments.”
Prerequisites for Expansion—Within the Division

- What is the *educational rationale*?
- Do we have “adequate clinical material?“
  - Number of complex cases?
- Do we have sufficient high quality faculty?
- Sufficient infrastructure?
  - Didactics
  - Vascular lab exposure
  - Simulation
Prerequisites for Expansion—Beyond Your Division...

- Secure funding
- Obtain Chairman support
- Support of overlapping PDs?
  - General Surgery
  - Other departments?

Forget about your pride Son: We're expected to beg...
Expansion: Other Considerations

- No program exists in a vacuum--Will there be "collateral damage"
  - Redistribution of funding?
  - Impact on cases numbers.
- Benefits for other programs?
- Pick rotations and partners wisely!
Summary: “Making It Happen”

- Look at the Program Requirements on the ACGME website early in the process.
- Focus on educational rationale and feasibility.
- Minimize collateral damage.
- Buy-in from stake-holders.
- Funding central to feasibility.
Start Date Considerations and the Impact on Trainees

Matthew J. Eagleton, MD
Director, Vascular Surgery Training Programs
Cleveland Clinic Lerner College of Medicine – CWRU

Association of Program Directors in Vascular Surgery
Chicago, IL
April 1, 2016
American Board of Surgery

• Requesting Fellowship start dates be moved to August 1
Why?

- Concern about the timing for General Surgery residents to transition from the end of their residency program to the fellowship program
- Tight turnaround time can cause issues
  - Completing the residency obligations
  - Pressure to arrive and “inprocess” by July 1 for the fellowships
Benefits of August 1 start date

• Allows residents to fully complete their residency program
  — 48 week obligation
  — Don’t need to use vacation to meet the fellowship demands

• Provides trainee time to
  — Move
  — Participate in “Boot Camps”
  — Study and take the General Surgery Qualifying Exam – which is July 19, 2016

• Allows time for senior fellows to be present in the hospital in July during a critical transition of care period for junior trainees
Concerns

- Transition to this can be difficult
- Trainees will have a month during which time they receive no income
- Will need to apply for Cobra for insurance coverage
- Separation of orientation to the hospital for their new program will need to be arranged separate from the remainder of incoming trainees in July
- May present a logistic issue for those trainees working with a VISA
Other Support

• Has been the policy of Orthopedics for several years

• Has gained support from
  – Fellowship Council
  – Surgical Critical Care
  – Thoracic Surgery
  – Transplant Surgery
  – Colorectal Surgery
  – Pediatric Surgery
  – Surgical Oncology
What will Vascular Surgery do?
Thank you