Welcome to Stanford

Alex Macario MD, MBA
Professor
Department of Anesthesiology, Perioperative and Pain Medicine
Vice-Chair for Education
Program Director, Residency
amaca@stanford.edu
Our Mission

At Stanford, we provide the environment and resources to help fulfill your highest professional potential as an anesthesiologist.
Stanford Resident: “I think the key selling points of our program are”:

- Unquestionably good clinical training
- Dynamic and talented group of residents
- Supportive faculty
- Appreciative administration
- Outstanding fellowship programs
- Hard working and have fun
- Innovation in education
The goal is to produce outstanding clinical anesthesiologists & leaders, who also have additional areas of expertise

- Research via the FARM program
- Extra training in some clinical subspecialty
  - For example, the echo track
- Global Health
- Medical Education
- Quality Improvement/Management/IT
- Combined clinical training in pediatrics & anesthesia
- Combined training in internal medicine & anesthesia
Stanford Anesthesia Residency Options

• 3 year advanced (n=13 positions)
  – Affiliated internship at the Valley (n=4)
  – SF Kaiser (n=2)

• 4 year categorical (n=8 positions)

• Combined pediatrics/anesthesia 5 year program (n=2 positions)

• Combined medicine/anesthesia 5 year program including pgy1 yr (n=3 positions)
The Clinical Base Year

- Thirteen 4 week rotations similar to the Stanford Medicine preliminary medicine year
- 1 month each of Emergency Medicine, ICU, Anesthesiology
- 7 Medicine Inpatient rotations (e.g., Cardiology)
- 2 mths of consult services (e.g., Pulmonary)
- Preoperative Anesthesia Evaluation Clinic
- 2 weeks acute pain rotation, 2 weeks CVICU rotation
- Monthly anesthesia online module (START)
- Monthly Simulation Workshop with other interns
- 4 wks vacation
Why Choose Stanford?

How great the education is depends on how great the clinical care is and how great the scholarship is in the anesthesia department.
Anesthesia Residency

- Faculty
  - World class expertise, leaders
- Patients/Facilities
- Curriculum
- Residents
- Alumni
Even more reasons to choose Stanford Anesthesia...

Facilities/Patients
Stanford University Medical Center
New Stanford hospital
Children’s Hospital
Santa Clara Valley County Hospital
Curriculum
# Stanford rotation schedule (mths)

<table>
<thead>
<tr>
<th>ACGME required</th>
<th>Additional electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuro</td>
<td>VA Chief Resident</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>Thoracic</td>
</tr>
<tr>
<td>ICU</td>
<td>Liver transplant</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>Peds cardiac</td>
</tr>
<tr>
<td>Pre-op Clinic</td>
<td>Research</td>
</tr>
<tr>
<td>Acute Pain</td>
<td>Difficult airway</td>
</tr>
<tr>
<td>Chronic pain</td>
<td>Ambulatory</td>
</tr>
<tr>
<td>Nerve blocks</td>
<td>Orthopedic</td>
</tr>
<tr>
<td>PACU</td>
<td>VA</td>
</tr>
<tr>
<td>Cardiac</td>
<td>County</td>
</tr>
<tr>
<td></td>
<td>Echo</td>
</tr>
<tr>
<td></td>
<td>Urology/Bariatric</td>
</tr>
</tbody>
</table>

- Neuro: 2
- Obstetrics: 2
- ICU: 4 (1 as intern)
- Pediatrics: 2
- Pre-op Clinic: 1
- Acute Pain: 1
- Chronic pain: 1
- Nerve blocks: 1
- PACU: 0.5
- Cardiac: 2
- VA Chief Resident: 2
- Thoracic: 1
- Liver transplant: 1
- Peds cardiac: 2
- Research: 0-9
- Difficult airway: 1
- Ambulatory: 1
- Orthopedic: 1
- VA: 4
- County: 3
- Echo: 0.5
- Urology/Bariatric: 1
## Case numbers

<table>
<thead>
<tr>
<th>Case Type</th>
<th>ACGME Minimum Required</th>
<th>% above at Stanford</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients &lt; 3 months old</td>
<td>5</td>
<td>236%</td>
</tr>
<tr>
<td>Patients &lt; 3 years old</td>
<td>20</td>
<td>316%</td>
</tr>
<tr>
<td>Patients &lt; 12 years old</td>
<td>100</td>
<td>150%</td>
</tr>
<tr>
<td>Spinals</td>
<td>40</td>
<td>251%</td>
</tr>
<tr>
<td>Epidurals</td>
<td>40</td>
<td>422%</td>
</tr>
<tr>
<td>Peripheral Nerve Blocks</td>
<td>40</td>
<td>276%</td>
</tr>
<tr>
<td>Trauma/Burns</td>
<td>20</td>
<td>199%</td>
</tr>
<tr>
<td>Total Cardiac</td>
<td>20</td>
<td>275%</td>
</tr>
<tr>
<td>Intrathoracic Non-Cardiac</td>
<td>20</td>
<td>162%</td>
</tr>
<tr>
<td>Vascular, Major Vessels</td>
<td>20</td>
<td>174%</td>
</tr>
<tr>
<td>Vaginal Delivery</td>
<td>40</td>
<td>235%</td>
</tr>
<tr>
<td>Cesarean (including high risk)</td>
<td>20</td>
<td>269%</td>
</tr>
<tr>
<td>Pain Evaluation - acute, chronic, cancer</td>
<td>20</td>
<td>291%</td>
</tr>
<tr>
<td>Intracerebral Open</td>
<td>11</td>
<td>414%</td>
</tr>
<tr>
<td>Total Intracerebral (with endovascular)</td>
<td>20</td>
<td>200%</td>
</tr>
</tbody>
</table>
There are more than 500 lectures/yr for anesthesia residents
Stanford Anesthesia
Class of 2016

• Fellowships: 15 of 25 residents (60%)
• N=5 private practice (20%)
• N=5 academics (20%)
2016 senior class
15 of 25 residents (60%) are doing fellowships

Regional anesthesia (n=3)
*Stanford, Virginia-Mason, Duke

Research (n=4)
*Stanford

Cardiac anesthesia (n=2)
*Stanford, UCSD

Pediatric anesthesia (n=2)
*Stanford, Baylor

ICU (n=2)
*Stanford

ENT/airway and OB (n=1 each)
*Stanford
Stanford Anesthesia
Class of 2000-where are they now?

- 11 or 50% private practice
- 11 or 50% academics
  - Stanford (n=6)
  - Palo Alto VA (n=2)
  - Packard (n=1)
  - Santa Clara Valley (n=1)
  - Yale (n=1)
2015 senior class
16 of 25 residents (64%): fellowships

Regional anesthesia (n=4)
*Stanford, Northwestern, Virginia-Mason, Duke

Pain medicine (n=4)
*Stanford, UCSF, Cornell, UCSD

Cardiac anesthesia (n=4)
*Stanford, UCSD, Brigham, U of Washington

Pediatric anesthesia (n=2)
*Stanford, Boston Children’s

ICU (n=1)
*Stanford

Transfusion medicine (n=1)
*Stanford
## Stanford graduate choices for Fellowship

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Management</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Research</td>
<td>4</td>
<td>3</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>ICU</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Regional</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Transfusion</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>OB</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>ENT/airway</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
Stanford Anesthesia Fellows

**ACGME (n=27)**
- 7 pain fellows
- 6 pediatric fellows
- 8 critical care
- 3 cardiac
- 3 OB

**Non-ACGME (n>15)**
- 3 OR management
- 3 regional anesthesia
- 1 pediatric pain
- 1 education
- 1 global health
- 1 pediatric cardiac
- 1 ent/difficult airway
- 1 neuro
- 1 advanced clinical
- 4-6 physicians doing research fellowship
- 2 anesthesia informatics and media
Something else that makes Stanford great...

Alumni
Stanford Anesthesiology Graduates
Last 50 years (n=600+)

Out of state 32%
In California 68%
Stanford resident alumni board certification

<table>
<thead>
<tr>
<th>Class</th>
<th>Total</th>
<th>Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>21</td>
<td>21 - 100%</td>
</tr>
<tr>
<td>2010</td>
<td>23</td>
<td>23 - 100%</td>
</tr>
<tr>
<td>2011</td>
<td>21</td>
<td>21 - 100%</td>
</tr>
<tr>
<td>2012</td>
<td>20</td>
<td>20 - 100%</td>
</tr>
</tbody>
</table>

National average 89%
24 of our graduates (many post fellowship) have joined the faculty over the past four years.
New initiatives

• Feedback Thursday
• Perioperative rotation at VA
• 15 minute lectures: 10am, noon & 2pm
• CA2 class QI projects
• New rotation: out of the OR with EP cases
• ASC scheduler rotation
• International rotations/Global health
  – Month rotation in Zimbabwe
STANFORD ADVANCED AIRWAY MANAGEMENT AND FIBEROPTIC COURSE
Dollars and Cents

“Compensation”
Stipends

• Moving Allowance from hospital $3,000
• Housing Stipend from department $3,600/year
• Education stipend from hospital $1,000/year
• Housing Stipend from hospital $6,000/year
• Hospital GME bonus $2,000/yr (for parking, phone)
• Education stipend from dept $775/year as CA2 & CA3
• iPad mini as new resident
• ASA membership dues $75/year
• Call meal money (dining dollars) of $10 for each 12-hour call shift worked
• DEA registration $550
• California medical license and renewal fee of $895 paid by GME