So you want to be a CT anesthesiologist...

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Reasons to NOT become CT anesthesiologist

• You want to be done with residency and start paying down your loans
• Peer Pressure
  • It’s OK if you don’t want to play with the cool kids.
  • Your parents will love you anyway
• “I just want to stay in academia”
• Job security
  • No evidence of generalist(s) being less successful than a cardiac specimens...
• My patient is coming for a Lap. Chole. and has “heart disease”
  • Adult cardiothoracic anesthesiology is devoted to the pre-operative, intra-operative, and post-operative care of adult patients undergoing cardiothoracic surgery and related invasive procedures.

* ACGME Program Requirements for Graduate Medical Education in Adult Cardiothoracic Anesthesiology (Subspecialty of Anesthesiology) Editorial revision: effective July 1, 2019 Currently-in-Effect Program Requirements incorporated into the 2019 Common Program Requirements
Accreditation:

- Society of Cardiovascular Anesthesiologists (SCA) was formed in 1978
- Yet, ACTA fellowship is one of the “new kids on the block”
- National Board of Echocardiography (NBE), a separate entity from both SCA and ACGME, sets standards for echocardiography training.
  - Perioperative TEE board certification 2004-onwards
  - PTEeXAM, curiously, given since 1997
- ACGME accreditation of ACTA started in 2006
- Other accredited fellowships include: Ambulatory Anesthesia, Critical Care, Neuroanesthesia, Obstetric, Pediatric, Public Policy, Regional Anesthesiology and Acute Pain Medicine, Transplant Anesthesia, and Trauma Anesthesiology

https://www.asahq.org/education-and-career/asa-resident-component/residentfellows-in-training/fellowship-opportunities

ACTA anatomy:

- Accredited programs in USA: 68
- (assuming my math is correct)...
- Positions total: 228
  - Average student per program is 3.35
  - Duke 14, Cleveland 16, Baylor 10
  - Approx 3 students per class is likely mean
  - It is also the median (#MathSkills!)
- Last, but not least, in this graph are...
Fellowship structure guidelines:

- Fellowship-trained physicians serve the public by providing subspecialty care, which may also include core medical care, acting as a community resource for expertise in their field, creating and integrating new knowledge into practice, and educating future generations of physicians.
- 12 month in length, exposure to surgical and non-surgical CT patients
- NBE-certified faculty availability is mandated by AGCME.
  - Ouroboros paradigm

Clinical curriculum: at least 6 month of CT OR

- Minimum 100 cardiac surgical procedures, at least 50 requiring CPB
- Minimum 25 AV/MV repairs/replacements, minimum 5 each on CPB
- Minimum 25 myocardial revascularizations with or without CPB
- At least 2 of the following categories:
  - Adult correction/revision of congenital cardiac lesions
  - Cardiac and lung transplantation
  - Placement of circulatory assist devices including left heart bypass, ventricular assist devices, intra-aortic balloon pumps, and ECMO
  - Electrophysiology procedures requiring general anesthesia
- Minimum 15 non-cardiac thoracic cases
- Endovascular or open thoracic aorta cases & CSF drain management
- Minimum 35 cases personally performed by the Fellow. No supervision.

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The “other” 6 months:

• Minimum 1-month ICU rotation
• 2 months of elective rotations, tightly structured. No Frivolities!
  • Related to the care of the cardiac patient
  • Inpatient cardiology, invasive cardiology, medical (cardiology) critical care, pediatric cardiac anesthesiology, and extracorporeal perfusion
• Fellows must perform and interpret TEE examinations to meet NBE requirements for certification in advanced peri-operative TEE
  • That’s what most applicants (erroneously) think the fellowship is all about
  • Minimum 150 TEEs performed and another 150 interpreted
  • Excess of performed echoes can fulfill the interpretation requirement, but not vice versa.

And more experiences in the realm of CT:

• Scholarly activity – All fellows must complete a scholarly project
  • The results of such projects must be disseminated through a variety of means, including publication or presentation at local, regional, national, or international meetings
  • SCA echo week poster
  • SCA and TAS annual symposium poster
  • SCA newsletter contribution
  • ASA conference presentation
  • Primary research publication
  • Grand rounds within or outside the training institution
• QI and patient safety exposure is also required, with more latitude in its expression
Applicant data: Don’t despair!

- SF MATCH used since 2012
- I’m a survivor of pre-2012 nightmare: different application for each program.

2018 interview season:
- 64 programs
- 212 positions
- 354 applicants
- 1.7 applicant/spot
- 76% match rate

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Cool kid on the block?... Why not!

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<thead>
<tr>
<th>Adult Cardiothoracic Anesthesiology Fellowship</th>
<th>June 2013</th>
<th>June 2014</th>
<th>June 2015</th>
<th>June 2016</th>
<th>June 2017</th>
<th>June 2018</th>
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<tr>
<td>APPLICANT DATA</td>
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<td>Applicant registrations</td>
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<tr>
<td>Unmatched Total</td>
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<td>41</td>
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<td>59</td>
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<td>66</td>
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<td>Applicant Matching % (Overall)</td>
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<td>81%</td>
<td>86%</td>
<td>77%</td>
<td>70%</td>
<td>76%</td>
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<td>Total # of Withdrawals</td>
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<td>21</td>
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<td>PROGRAM DATA</td>
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<tr>
<td># of Participating Programs</td>
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Image(s) source: Google.com
https://www.sfmatch.org/SpecialtyInsideAll.aspx?id=24&typ=1&name=Adult#

How do I...? Central Application Service (CAS)

- CAS distributes applications to fellowship training programs online.
  - Completed CAS application form (online submission)
  - Current Curriculum Vitae
  - USMLE 1/COMLEX 1 or equivalent medical exam transcript(s)/report(s)
  - USMLE 2 CS/COMLEX 2 CE or equivalent medical exam transcript(s)/report(s)
  - USMLE 2 CK/COMLEX 2 PE or equivalent medical exam transcript(s)/report(s)
  - USMLE 3/COMLEX 3 or equivalent medical exam transcript(s)/report(s)
  - Three letters of reference
    - One letter should be from training program director.
    - The other two letters should be from objective physicians. (i.e., not relatives or family friends) who have direct personal knowledge of your skills and ethics
- The service is priceless! Standard application for all programs!

“Priceless” has a $ tag:

- $100 non-refundable applicant registration fee
  - covers registration and matching.
- Fees are progressive, chose wisely
  - Initial cost is $6 per program at its lowest. Shop smart.
- Can add extra programs after submission
  - $35 per program
  - For the 3rd time: chose wisely!
- I remember spending >$100 just for mailing applications in 2007.

https://www.sfmatch.org/SpecialtyInsideAll.aspx?id=24&typ=1&name=Adult#
Timetable. Decide your 2021 fate today!

- **Monday, November 12, 2019**
  - Applicant registration begins.
  - Registration is open up until the rank list deadline.
  - Applicants are encouraged to register as early as possible – application review and interview set-up.

- **Wednesday, March 4, 2020**
  - Target Date for applicants to complete the requirements for application distribution.
  - NOT a deadline.

- **Monday, June 1, 2020 12:00 PM PST**
  - Match Deadline
  - **Match Deadline**
    - ALL rank lists must be submitted by 12:00 PM (noon) PST.
    - Rank list choices are locked after this date.

- **Monday, June 15, 2020**
  - Match Results
    - Match results are made available to programs and applicants.

- **Tuesday, June 16, 2020**
  - Vacancies are announced on the Immediate Vacancies page of SF Match.

- **July 2021**
  - ACTA Fellowship training begins.

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How do I boost my candidacy?

- Mackersey and Leff conducted survey of 66 accredited programs 2018

[Graph showing candidate application factors with letters of recommendation and ITE scores as the most critical, followed by reputation of residency program, basic exam score, USMLE scores, personal statement, cardiothoracic relevant research, and board certification in critical care]

...and the wisdom to know the difference II

- Scores – ITE, Basic exam and USMLE
- # 2, # 4, and # 5 of importance if you believe survey result by Mackersey et.al
  - Not necessarily changeable, but certainly within your control realm
- USMLE is most distant past – likely not worth revisit
- Excellent screening tool at initial application review for us
Dual fellowship: opportunities and challenges

- No formal process to integrate both CC and ACTA applications
- Each program offers different interview time table
  - Match exception offers are a commonplace and frustrating occurrence
- Often CC year is 1st, given the matching constraints for ACTA
  - A lot easier for me to seclude a spot 2 years in advance instead of 1 in ACTA
- An even more “niche” position in the employment search
  - Of which I am not qualified to speak.
- Contact your Program Director(s) early and often to ensure smooth application process
Thank you!

• Questions?
• Program Director: Joshua Sebranek
  • jsebrane@wisc.edu
• Associate PD: You are looking at him
  • zhukov@wisc.edu
• Program coordinator Brandon Allen Russell
  • russell2@wisc.edu
• Department web page:
  • anesthesia.wisc.edu