

CTSNet Program Profile Questionnaire

PROGRAM DETAILS

1. Names of the
 - a. Program director: [Joseph F. Sabik, M.D.](#)
 - b. Chief(s) of cardiac division: [Joseph F. Sabik, M.D.](#)
 - c. Chief (s) of thoracic division: [Joseph F. Sabik, M.D.](#)
 - d. Program Contact information: [Darlene Straub, Residency Coordinator, ph# 216-445-6816, email: \[straubd@ccf.org\]\(mailto:straubd@ccf.org\)](#)
2. Link to your program's website:
<http://my.clevelandclinic.org/heart/professionals/education/fellowship/ctsurgery/overview.aspx>



3. Indicate the # of residents accepted per year to your program: [2 residents](#)
4. Indicate the length of the program: [3 years](#)
5. Does your program have separate cardiac and thoracic tracks? [yes](#)
 - a. if yes, how many positions are there in each?
 - i. Cardiac positions: [1](#)
 - ii. Thoracic positions: [1](#)
6. Indicate the approximate deadline for application and interview dates:
 - a. Deadline: [Apply in ERAS before February 28th.](#)
 - b. Interview dates: [April](#)

CASE VOLUME

1. Please indicate the average number of cases per year performed in your program for the following ABTS categories:

| | Total Institution Cases | Total Cases per Resident |
|---------------------------------|-------------------------|--------------------------|
| Total number of cardiac cases: | 4,913 | 200-300 |
| Total number of thoracic cases: | 1,466 | 200-350 |
| Congenital heart disease: | 145 | 30-40 |
| Acquired valvular heart: | 2,428 | 50-90 |
| Valve repairs: | 667 | 30-50 |

| | | |
|--|-------|--------|
| Myocardial Revascularization: | 603 | 130 |
| Aorta: | 836 | 20-40 |
| Pneumonectomy, lobectomy, segmentectomy: | 228 | 80-100 |
| Esophagus resection: | 155 | 25-40 |
| Benign Esophageal Disease: | 97 | 30-60 |
| Heart transplants: | 49 | 2-30* |
| Lung transplants: | 121 | 2-30* |
| Ventricular assist device: | 40 | 5-30* |
| Minimally invasive cardiac: | 1,000 | 50-60 |

**Numbers will vary depending on the resident's focus for the year*

CURRICULUM

1. Details of curriculum:

- a. Indicate the # of months on each rotation for each year (for each cardiac and thoracic track if applicable), and which hospital(s):

| CLEVELAND CLINIC – CARDIAC TRACK | | | | |
|----------------------------------|------------------|---------------|------------|---------------|
| FIRST YEAR | | SECOND YEAR | | THIRD YEAR |
| 6 months | 6 months | 9 months | 3 months | 12 months |
| Adult Cardiac | General Thoracic | Adult Cardiac | Congenital | Adult Cardiac |

| CLEVELAND CLINIC – GENERAL THORACIC TRACK | | | | | |
|---|---------------|---------------|------------|-------------------------------|------------------|
| FIRST YEAR | | SECOND YEAR | | | THIRD YEAR |
| 6 months | 6 months | 6 months | 3 months | 3 months | 12 months |
| General Thoracic | Adult Cardiac | Adult Cardiac | Congenital | General Thoracic/ elective | General Thoracic |

- b. Please describe any opportunities for electives: *The third year is tailored towards the resident's area of interest. Some options include endovascular (3 months), robotics (3-6 months), heart failure (3-6 months), lung transplantation (3-6 months), and advanced GI endoscopy/bronchoscopy (3 months)*
- c. Please describe any wet labs and simulation technology used in training and how frequently these are used: *Every other month, a dry lab is devoted to teaching cannulation, anastomotic and valvular skills on a dry cardiac simulator. On alternating months a wet lab is conducted using animal models or cadavers. These simulation sessions are integrated into the Saturday morning conference series. Residents have access to several resources for additional simulator training including a home cardiac simulator (in production), dry lab cardiac simulator, virtual endovascular trainer, cadaver lab, and robotics (computer, dry lab and pig lab simulator).*
- d. Please briefly describe the number and type of weekly conferences residents are expected to attend: *The Friday board review lectures, Wednesday M&M/aortic conferences and Saturday morning case presentations form the core lecture series. Additional conferences specific to thoracic and congenital are attended by residents rotating on those services.*

| Name of Conference | Frequency (weekly, monthly, etc.) | Mandatory or Elective | Department Responsible |
|--|--------------------------------------|-----------------------|--------------------------|
| Heart & Vascular Institute Grand Rounds | Weekly | Elective | Department of Cardiology |
| Journal Club | Bi-monthly | Mandatory | Department of CT Surgery |

| | | | |
|---|-----------|---------------------------|---|
| Residents Friday Conference | Weekly | Mandatory | Department of CT Surgery |
| Residents Saturday Conference | Weekly | Mandatory for Weekends on | Department of CT Surgery |
| Quality Assurance (M&M) | Bi-weekly | Mandatory | Department of CT Surgery |
| Catheterization Conference – Pediatrics | Weekly | Elective | Pediatric & Congenital Heart Surgery – Dr. Athar Qureshi |
| Pediatric Grand Rounds | Weekly | Elective | Pediatric & Congenital Heart Surgery – Dr. Robert Stewart |
| Transplantation Conferences | Weekly | Elective | Department of CT Surgery |
| Thoracic Conferences | Weekly | Mandatory | Residents/Staff Dept of Cardiothoracic Surgery |
| Aortic Conference | Bi-weekly | Mandatory | Department of CT Surgery |

Conference Format: (one hour each – except simulator sessions which are 2-3 hours)

- HVI Grand Rounds and Pediatric Grand Rounds – Lecture format with Q/A time at end.
 - Journal Club – Interactive discussion based on selected literature topics.
 - Residents Conference – Friday and Saturday – Resident presentations with Q/A period.
 - Transplantation, Thoracic and Catheterization Conferences – Faculty/resident discussion re: individual patients to arrive at treatment plans via group consensus.
 - M&M – resident presentation (service specific) with Q/A time.
- e. Please indicate what provisions are made for attending national research meetings (i.e., # per year for which funding is provided, and if that is dependent on presenting an abstract): Our residents can attend one funded meeting or educational course per academic year (usually STS or AATS). Should a presentation be accepted at an additional meeting in the same academic year, they may receive funding to attend that meeting as well. If they are involved with resident driven or STS committees, they are also allowed to attend in order to participate in those meetings.
- f. Please describe opportunities for research (clinical, basic science): At the heart of the research experience at the Cleveland Clinic is the annual research day. There is a considerable amount of work that goes into this event. Residents begin by choosing a research topic and mentor. Usually, this is in clinical outcomes research although basic science projects are also available. Residents take online research courses and develop a proposal in conjunction with their mentor. They meet regularly with their mentor, statistician, and Dr. Blackstone. The statisticians and editors help refine presentations for research day. These projects go on to form the basis for publications and national presentations. Residents work with faculty on additional case series, videos and book chapters in areas of interest.
- g. Please describe the call structure (i.e., frequency, in-house vs. home call): The call schedule adheres to the 80 hour work week and ensures 2 weekends per month free of clinical responsibility. In-house call residents are expected to complete clinical activities by the end of their 24 hour shift and, thus, are rarely able to operate on post call days. Call is typically q 4 days in house for 6 months out of the first year and 6-9 months out of the second year. Residents on thoracic or congenital take home call an average of every 4th night. During the chief year, residents are on home back up call for issues related to their respective services.
- h. Please indicate whether funds are provided for loupes? Textbooks? Phones? A textbook is provided for each incoming resident.
2. Subjective:
- a. Please describe your program’s biggest strengths: The strength of the program lies in the enormous volume of cases and the quality of care that fellows are exposed to on a daily basis. The Heart and Vascular Institute is a centralized and efficient unit with a multitude of physician extenders and consultants. This allows residents to gain extensive operative exposure while delivering high quality perioperative care. 2 associate program directors ensure that the operative experience for the residents is meaningful and not just abundant. Reoperations, alternative cannulation strategies and minimally invasive exposures are the norm rather than subspecialized skills that residents gain at the end of their training. The program is extremely committed to producing leaders in the field of cardiothoracic surgery. This is evidenced by the many graduates who have become renowned practitioners in coronary surgery, minimally invasive valvular surgery, transplantation and aortic surgery. For motivated residents, this program provides all of the support needed to excel as an academic or private practitioner in cardiothoracic surgery.
- b. Please provide 1-2 adjectives that describe your program: high-volume, supportive

- c. Please indicate what is unique about your program relative to other programs: **There are several unique aspects of this program including:**
1. The most extensive exposure to cardiovascular pathology in the country.
 2. Meaningful exposure to a wide variety of new and emerging technologies.
 3. Ability to gain proficiency in subspecialty areas including robotics, transplantation, TAVR and aortic surgery without interrupting or extend training for rotations abroad.
 4. Unparalleled access to research and outcomes data.

GRADUATES

1. Indicate the percentage of graduates that do further training: **In the past 5 years, one graduate pursued further minimally invasive thoracic surgery training at Cedars-Sinai, California and one pursued advanced transplantation and mechanical support training at the Cleveland Clinic, OH.**
2. Indicate the percentage of graduates that pursue academics vs. private practice: **30% Private, 70 % Academic**
3. Please provide an account of job placement for your graduates over the last 3 years:

| Resident | Year | Position |
|-----------------------|------|--|
| Brian Lima | 2012 | Cardiothoracic & Vascular Surgeons, PA, Austin, TX – Cardiac surgery |
| Siva Raja | 2012 | Cleveland Clinic, Cleveland, OH – Thoracic surgery |
| Ugochukwu Ogwudu | 2011 | South Jersey Health Care, NJ – Thoracic surgery |
| Alexis Shafii | 2010 | Baylor University Medical Center, Dallas, TX – Cardiac surgery |
| Sreekumar Subramanian | 2009 | University of Arizona, Tucson, AZ – Cardiac surgery |
| Sandeep Gupta | 2009 | Stony Brook University Heart Center, Stony Brook, NY – Cardiac surgery |
| Douglas Johnston | 2008 | Cleveland Clinic – Cardiac surgery |
| Roosevelt Bryant | 2007 | University of Minnesota Children’s Hospital – Congenital |
| Daniel Boffa | 2007 | Yale School of Medicine - Thoracic Surgery |

4. Please describe “super” fellowship opportunities (e.g. transplant, endovascular, minimally invasive, congenital) available at your institution: **As mentioned above, transplantation, mechanical assist, endovascular, aortic, and robotic surgeries are all offered as advanced “super” fellowships. These areas can also be pursued during the chief year.**

FUTURE CHANGES

1. Please indicate whether your program is planning on developing a Joint Thoracic/General Surgery (4+3) or Integrated Program (if your program already has one, please skip this section and complete the last portion of the questionnaire entitled “Additional questions for Joint Thoracic/General Surgery (4+3) and Integrated (i6) programs”)? **We are currently in the process of completing our application for a new six year integrated thoracic surgery residency program.**

JOINT THORACIC/GENERAL SURGERY (4+3) and INTEGRATED PROGRAMS (I6)
Please only fill this out if your program already has an approved 4+3 or integrated program

1. Please indicate the # of residents accepted per year: **Approx. 1 for first three years, then 2 thereafter**
2. Please indicate the year of your first entering class: **Anticipated to be in 2014**
3. Details of curriculum:
 - a. Please indicate the # of months on each rotation for each year, and which hospital.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------------|------------------|----------------------------|--------|----------------|------------------|------------------|------------------------|---------------------|-----------------|----------|----------|----------|
| 1 PGY | Thoracic Surgery | Cardio-Thoracic Anesthesia | CV ICU | Trauma Surgery | Vascular Surgery | Vascular Surgery | Cardiovascular Imaging | Cardiology Teaching | Cardiac Surgery | Gen Surg | Gen Surg | Gen Surg |

| | | | | | | | | | | | | |
|---|--------------------------------------|--------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------------|-----------------------------|-----------------------------|
| 2 | Transplant Surgery Renal or Liver | Transplant Surgery Renal or Liver | Vascular Surgery | Vascular Surgery | Coronary Care Unit | Coronary Care Unit | Cardiac Surgery | Gen Surg | Gen Surg | Gen Surg | Thoracic Surgery | Interventional Cardiology |
| 3 | Gen Surg | Gen Surg | Gen Surg | Gen Surg | Thoracic Surgery | Thoracic Surgery | Thoracic Surgery | Echocardiography | Cardiac Surgery | Cardiac Surgery | Cardiac Surgery | CV ICU |
| 4 | Pediatric Cardiac | Pediatric Cardiac | Pediatric Cardiac | Cardiac Surgery | Cardiac Surgery | Cardiac Surgery | Thoracic Surgery | Thoracic Surgery | Thoracic Surgery | Vascular Surgery | Vascular Surgery | Vascular Surgery |
| 5 | Cardiac Surgery | Cardiac Surgery | Cardiac Surgery | Cardiac Surgery | Cardiac Surgery | Cardiac Surgery | Thoracic Surgery | Thoracic Surgery | Thoracic Surgery | Elective ¹ | Elective ¹ | Elective ¹ |
| 6 | Cardiac or Thoracic Surgery | Cardiac or Thoracic Surgery | Cardiac or Thoracic Surgery | Cardiac or Thoracic Surgery | Cardiac or Thoracic Surgery | Cardiac or Thoracic Surgery | Elective ² | Elective ² | Elective ² | Cardiac or Thoracic Surgery | Cardiac or Thoracic Surgery | Cardiac or Thoracic Surgery |

Gen Surg Rotations to include Community, Minimally Invasive, Acute Care

¹ Pediatric Cardiac, Thoracic Surgery, or Cardiac Surgery, depending on resident's interest/career goals.

² VAD/Transplant, Percutaneous Valve, Advanced Endovascular, Advanced Bronchoscopy, Robotics, Pediatric depending on resident's interest/career goals.

- b. Please indicate whether research time is included in the curriculum. Is this optional or required? **There are no separate research rotations at this time; however, our residents are required each year to make a research presentation at our Research Day Activities at the end of each academic year. They will work throughout the year with different staff research mentors on their project (see above).**
- c. Please briefly describe what exposure students will receive to fields adjunct to CT surgery (i.e., echocardiography/cardiac imaging, cardiology, ICU, endovascular technology): **See block diagram above for complete list but rotations do include: echocardiography, cardiac imaging, CCU, CVICU, cardiac anesthesia, trauma.**

OTHER

1. Please elaborate on any other unique components of your program not captured in this questionnaire.

The Department of Thoracic & Cardiovascular Surgery at Cleveland Clinic is the largest cardiothoracic surgery department in the country, consistently performing more heart operations than its counterparts at any other hospital in the United States. Additionally, our department continues to be an internationally recognized academic leader in the field since its early development as a specialty. In 2010, there were 4,346 cardiac cases and 1,364 thoracic cases performed at main campus. This provides ample opportunity to provide our residents with the best education and operating room experience possible.