# **CTSNet Program Profile Questionnaire**

### PROGRAM DETAILS

- 1. Names of the
  - a. Program director: John B. Flege, Jr., M.D., J.D.
  - b. Chief(s) of cardiac division: Louis B. Louis, IV, M.D.
  - c. Chief(s) of thoracic division: Sandra L. Starnes, M.D.
- 2. Program Contact information:

Jay Asplan Program Coordinator, 231 Albert Sabin Way, Cincinnati, OH 45267-0558 Tel: 513-584-1387

- 3. Link to your program's website: http://surgery.uc.edu/content/Education/fellowship%20cardio%20th.html
- 4. We would be happy to post relevant pictures regarding your program (3 pictures maximum).



UC College of Medicine



University of Cincinnati Medical Center Campus

- 5. Indicate the # of residents accepted per year to your program: 1
- 6. Indicate the length of the program: 3 years
- 7. Does your program have separate cardiac and thoracic tracks? No
- 8. Indicate the approximate deadline for application and interview dates:
  - a. Deadline: Jan 30<sup>th</sup>
  - b. Interview dates: We usually have 3 interview dates in Feb and March. However, we are willing for applicants to visit on alternative dates if our scheduled dates don't work.

## 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:	1000	250
Total number of thoracic cases:	700	350 total & 250 major
Congenital heart disease:	350	40
Acquired valvular heart:	220	50
Valve repairs:	80	unknown
Myocardial Revascularization:	350	110
Aorta:	Unknown	20
Pneumonectomy, lobectomy,	100	60
segmentectomy:		
Esophagus resection:	30	25
Benign Esophageal Disease:	Unknown	Unknown
Heart transplants:	N/A	N/A
Lung transplants:	N/A	N/A
Ventricular assist device:	Just started program	N/A
Minimally invasive cardiac:	100	Unknown

### 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):

Year 1	4 months	4 months	1 month	3 months
	Thoracic	Adult Cardiac	Endovascular	Congenital
	University	University	University	Children's
Year 2	4 months	4 months	4 months	
	Adult Cardiac	Adult Cardiac	Thoracic	
	University	Good Sam	University	
Year 3	4 months	4 months	4 months	
	Adult Cardiac	Thoracic	Adult Cardiac	
	Good Sam	University	University	

Each year is divided into three rotations that are four months long. Our first year starts in thoracic surgery as most general surgery residents have had a stronger exposure to thoracic than cardiac surgery. The next rotation is adult cardiac surgery at the University Hospital (UH) where the fundamentals are taught. The resident spends one month on endovascular during which time he/she is exposed to a large volume of endovascular procedures (500/year) of all types. The last rotation of the first year takes place at Cincinnati's Children Hospital Medical Center where a robust pediatric cardiac surgery exposure takes place.

The second year starts back at the UH on the adult cardiac surgery service. Emphasis is placed in further developing technical skills. The expectation is that the resident will be able to perform straightforward cardiac cases from the surgeon's side and have an increasing operative experience for more complex cases. The resident will gain experience in all aspects of the perioperative management of VADs, heart transplantation and ECMO. The second rotation is thoracic surgery, where thoracic residents start taking general surgery residents through basic cases while strengthening their decision-making abilities and advanced VATS skills. The year ends at the Good Samaritan Hospital (GSH) where advanced minimally invasive cardiac surgery is performed as well as a large number of open valvular operations. This first exposure to minimally invasive cases provides ample experience in all aspects of the perioperative workup of patients undergoing robotic mitral valve repair, atrial fibrillation procedures as well as minimally invasive cannulation for cardiorespiratory bypass.

The third year places the resident back on general thoracic surgery at the UH where a chief-resident level of performance is expected with Faculty assisting the resident in the performance of both common and advanced procedures. Next, the resident returns to GSH, where he or she is expected to perform most of the operative robotic cases taking full advantage of the dual console of the daVinci Si. Lastly, "finishing school" in cardiac surgery takes place at the UH where technical skills are fine-tuned and the most independence is given in an attempt to emulate the attending surgeon role that our residents will soon thereafter step into.

b. Please describe any opportunities for electives:

There is an opportunity to spend additional time on endovascular or thoracic depending on the resident's interest.

c. Please describe any wet labs and simulation technology used in training and how frequently these are used:

The program has 2-4 cadaver simulation labs per year in our Center for Surgical Innovation. Thoracic faculty take residents through VATS lobectomies, pneumonectomies or sleeve lobectomies. There is also opportunity to perform sternotomies and explore the heart and large vessels to understand anatomy and complex cardiac procedures in a more comprehensive way. The rotation at Good Samaritan Hospital, which totals eight months, provides full and unrestricted access to the clinical lab where a second daVinci Si robot is used exclusively for educational purposes. The residents frequently perform valve repairs and coronary bypass on pig hearts using the robot with faculty mentoring.

d. Please briefly describe the number and type of weekly conferences residents are expected to attend:

We have a weekly cardiothoracic teaching conference which follows the TSDA core curriculum. Cardiothoracic faculty as well as faculty from other disciplines give lectures and lead discussions on the assigned topic. After 3 years, all topics in the core curriculum are covered and residents get a CD with all lectures given over the 3 years. This is very useful in preparation for the ABTS qualifying examination. We have a monthly journal club and monthly morbidity and mortality conference. We also have a weekly SESAT review in which the residents and faculty review approximately 10-15 questions per week. When on the thoracic rotation, we have a weekly preoperative conference where all cases for the following week are reviewed. Residents attend the various catheterization conferences which are joint conferences with cardiac surgery and cardiology when they are on the various adult cardiac surgery rotations. Elective conferences include multi-disciplinary thoracic oncology tumor board, pulmonary chest conference, interstitial lung disease conference and the multi-disciplinary critical care conference.

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):

Residents attend at least one national conference each year. In addition, we send the first-year resident to the annual Thoracic Surgery Bootcamp. We send the senior resident to the annual Cardiothoracic Technology Symposium. If a resident gets an abstract accepted, we also fund attendance at that meeting.

f. Please describe opportunities for research (clinical, basic science):

There is no dedicated research time; however, our residents do have ample opportunities to participate in clinical research. Residents are encouraged to complete at least one clinical project during their residency. Typically, we have 10-15 clinical projects in progress at all times for residents to choose from.

g. Please describe the call structure (i.e., frequency, in-house vs. home call):

Residents cover their respective services from home at night. The services are covered by the general surgery resident teams at night who take the first calls and keep in close contact with our residents. Coming in at night is reserved for emergency operative interventions or critically ill patients that require bedside attention. On the congenital service, which totals 3 months, residents take in-house call every 4-5 days.

h. Please indicate whether funds are provided for loupes? Textbooks? Phones?

The program offers a budget every year that is used by our residents to acquire loupes, textbooks, etc. There is an additional stipend that covers the expense of web-enabled cell phones. Each resident gets \$3000 per year to spend on textbooks, loupes, laptops, dues and one annual meeting. In addition, they get \$80/month for cell phones.

#### 2. Subjective:

a. Please describe your program's biggest strengths:

One of our biggest strengths is the diversity of clinical experience. Residents gain extensive experience in minimally-invasive surgery. We perform over 100 robotic cases per year and we have a dual console robot, so that the resident can perform the procedures under the direct supervision of the faculty. We also perform a large number of minimally-invasive lobectomies and esophagectomies. Residents get experience in interventional airway and esophageal procedures as well as off-pump coronary artery bypass surgery. We have just hired a dedicated VAD/transplant surgeon and started a Ventricular Assist Device program and anticipate doing approximately 40 VADs per year. We have a large endovascular program with about 500 endovascular procedures of all types performed each year. It is increasingly important for residents to come out of training with not only the basics, but also a niche that they can offer recruiting practices. Our residents have many niches to choose from. Another strength is our faculty, which is very diverse and dedicated to resident education. We provide personalized mentoring that results in individualized skills development. Every resident comes in with various degrees of exposure to thoracic and cardiac surgery and our program has the ability to accurately assess the residents' capabilities and develop their skills accordingly. This ensures that by the end of the training our resident have the skills needed to become successful cardiothoracic surgeons.

b. Please provide 1-2 adjectives that describe your program: education-centered, broad experience

c. Please indicate what is unique about your program relative to other programs:

Because we have a 3-year program, we are able to provide training in advanced technologies such as robotic cardiac, minimally-invasive thoracic surgery, endovascular procedures and VADs. We also have a very strong educational focus with committed faculty, simulation training, and a strong educational conference schedule.

#### GRADUATES

- 1. Indicate the percentage of graduates that do further training: We are a newer program and have only had 3 graduates. They have all taken jobs out of training.
- 2. Indicate the percentage of graduates that pursue academics vs. private practice: 1:2
- 3. Please provide an account of job placement for your graduates over the last 3 years: Our first graduating resident entered private practice in Colorado and started the first minimally invasive cardiac surgery center in his institution. Our second resident joined a successful group in Oklahoma performing both cardiac and thoracic surgery. Our third resident joint the Division of Thoracic Surgery at the University of Cincinnati.
- 4. Please describe "super" fellowship opportunities (e.g. transplant, endovascular, minimally invasive, congenital) available at your institution: None

#### 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 developing an integrated program.