

The Children's Hospital of Philadelphia

Proposed Fourth Year Fellowship in Advanced Non-Invasive Cardiovascular Imaging

12 month fellowship (80% devoted to clinical endeavors, 20% devoted to research and/or significant QI activities).

Clinical Fellowship goals:

1. Learn how to independently perform and interpret images of simple and complex congenital and acquired heart disease using transthoracic echocardiography.
2. Acquire skills in 3-dimensional echocardiographic imaging and other modalities including contrast echocardiography, stress echo, and strain imaging.
3. Learn how to independently perform transesophageal echocardiograms (TEE) and epicardial imaging including in the operating room setting with the communication skills required to convey pertinent information to the cardiothoracic surgeon.
4. Learn how to independently perform TEE in the cardiac catheterization laboratory in assistance of device placements.
5. Demonstrate ability to educate junior trainees in echocardiography, appropriately delegate and oversee daily workflow of the echo service, including CICU echoes and core-lab responsibilities.
6. Demonstrate independence in taking echo night and weekend call, including triaging of studies, accurate interpretation and communication with clinical team and overseeing junior fellows and sonographers.

With this in mind, expectations for the fourth-year fellow are as follows:

1. Spend 20% of time imaging in the CICU and performing TEE studies in the Operating Room .
2. 20-30% of time acting as “junior attending” in the Echo lab; running the lab for the day, interpreting studies as they are being performed, supervising sedated echoes and assisting in TEE studies in the cath lab for device placement.
 - a. Also develop skills in advanced imaging techniques such as 3D and strain
3. 20% of time (1 day per week) devoted to Fetal or MRI, this can be adjusted based on specific interests and training needs.
4. 10% time for General cardiology activities (unfunded fellows will have this additional clinical commitment in either inpatient, outpatient or consults).
5. Involvement in the Quality core of the echo lab with the following activities:.
 - Work with the QI sonographer lead and echo attendings to facilitate the Quarterly Echo Lab QA sessions
 - Responsible for monthly review of echo discrepancies with Drs. Natarajan and Quartermain and help to manage the database.
6. Will take 6 weeks of Echo night call (average 2 week nights per month), with 6 weekend (attending as supervisor) over the year.
 - For those 6 weekends of echo call the 4th year fellow will be acting as the the pre-attending for surgical conference the following Thursday.
7. Perform the following teaching/presentation activities:

- Supervise and teach the cardiology fellows during their echo rotations.
- Monday conferences:
 - a. Organize and recruit faculty or advanced imaging fellows to give conference twice/month.
 - b. Oversee presentations by first year fellows
 - c. Provide 1 internal Echo Lab talk
- Organize and present TEE educational case sessions once/month
- Present echoes at the Wednesday ‘Presurgical conference’ (4:30 pm OR obs room)
- Orient the incoming 2nd year cardiology fellows prior to their first day of TEE rotations

Research Goals

8. 20% of time can be devoted to clinical research and/or a QI project
 - a. Expectation is to present at least one abstract during this year, preferably at the American Society of Echocardiography Scientific Sessions (ASE, submit to research core (and QI core, if applicable).