Advanced Cardiac Imaging Rotation: Objectives, Overview, Curriculum
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Course Objectives:
1) To provide senior cardiology fellows additional exposure to advanced cardiac imaging techniques, including echocardiography (Echo), cardiac MRI (CMR), and cardiac/coronary CTA (CCT).
2) To provide a practical, evidence-based approach to using multimodality cardiac imaging in cardiovascular medicine.
3) To prepare senior cardiology fellows for the increasing emphasis of advanced imaging and multimodality imaging on the ABIM cardiovascular medicine examination.

Course Overview:
♦ Senior cardiology fellows will dedicate 4 weeks to obtaining increased exposure to the acquisition and reading of CMR, CCT, and Echo studies.
  o July-December: 3rd and 4th year fellows
    ▪ (CMR/CCT/Echo mix tailored to each fellow’s interests)
  o January-June: 2nd year fellows

♦ Schedule: Echo all 4 weeks (typically 8AM-6PM); CMR reading sessions all 4 weeks (1-2 hrs in afternoon); Second 2 weeks – added CMR/CCT exposure, including participation in CMR/CCT acquisition (1-2 cases per day) and CCT reading sessions (additional 1-2 hrs per day).

♦ Echo component:
  o Perform, Interpret, and Pre-read TEE, TTE, and stress TTE studies
    ▪ Stress TTE reading will be of greater emphasis for more advanced fellows
  o Review studies with Echo attending
  o Complete the online Echo-SAP course (subscription through CardioSource is active)
    ▪ Certification is provided after completion of course

♦ CMR/CCT component:
  o Learn basic acquisition, processing, quantification, and interpretation of CMR/CCT studies with the CMR fellow and Radiology CV fellows
  o Review CMR/CCT studies with Radiology and/or Cardiology attending
  o Complete the online CCT-SAP and SCMR didactic training
    ▪ Certification is provided for CCT-SAP (Cardiosource), certification for SCMR training program requires SCMR membership (exploring a means for providing this SCMR training for fellows)
    ▪ For SCMR training, go to website: http://training.scmr.org/login/index.php
      ▪ Login as a guest and complete modules 1-10 without registering
  o Obtain basic experience with Tera Recon for 3D CCT image processing/viewing

♦ Didactics – In addition to required Echo-SAP, CCT-SAP, and SCMR training:
  o Fellows will review faculty-prepared introductory slide sets with cases that cover specific topics in multimodality imaging as it pertains to the following topics:
    ▪ Myocardial evaluation - Ischemic and Non-ischemic CM
    ▪ Pericardial Evaluation, Cardiac Masses
- Valvular Assessment, Shunts, Congenital Heart Disease
- Chest CT and Coronary CTA – indications and use
- Multimodality imaging – case-based decision making
  o All videotaped lectures can be downloaded and viewed at: [http://radiology.stanford.edu/sections/cardiovascular/](http://radiology.stanford.edu/sections/cardiovascular/)
  o Fellows will meet weekly with the Cardiology attending to go over any questions or concepts from these didactic slide sets.

♦ Presentations
  o Fellow will present at Echo Conference (Monday noon) once during their rotation, favoring clinical cases that also utilized MRI or CT data. In addition, the fellow can present a case at one of the MRI or CT Monday conferences as well.

♦ Evaluation
  o At each block’s conclusion, the Cardiology attendings will provide feedback to the fellow and request feedback from that fellow in order to improve the content, logistics, and overall learning experience of the course.

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