Educational Purpose of the Rotation
The research rotation is aimed at fellows who plan investigation-based careers. In the research track, the timing of each fellow's research experience within his/her overall training is flexible. For practical reasons, the first year is usually clinical and fellows are encouraged to begin research in the second year. However, various permutations of clinical and research months are possible depending upon individual circumstances.

Fellows in the research rotation will be expected to choose or work with an already hypothesis-driven project with one of our faculty members involved in clinical or basic science research. Each fellow will receive training in grant writing and learn how to submit a research proposal to a major funding source, such as the American Heart Association. Other expectations for fellows in the Research Track will be that they present the results of their work in abstract form at a national meeting and submit a manuscript for publication in a peer-reviewed journal.

The Pathophysiology rotation provides the Sub-specialty residents with experience in cardiovascular disease research. This specifically includes research, working in the lab, obtaining research results, assisting in grant writing and possibly submit a research proposal to a major funding source, such as the American Heart Association.

Rotation Attendings
George Abela MD
Gaurav Dhar MD
Ronald Voice MD
Tim Fischell MD

One or Two Sub-Specialty Residents are assigned to this rotation at one time. This is a required rotation.

Resources
The Cardiology Division at MSU provides opportunities in research due to its lab and services at Michigan State University. Methods of measurement in regard to research will be taught and used in the cardiovascular disease lab in the cardiology division.

Sub-specialty residents are given the opportunity to work in the research medicine domain.

Responsibilities
The expectations and responsibilities of this rotation apply to all sub-specialty residents (this is a required rotation).

Objectives
By the conclusion of the training program the sub-specialty resident will have an understanding of how to develop a good research plan, use research in clinical decision making, understand the use of appropriate statistics in research, as well as the research basics which include type of research and their common and fundamental components.

Instructional Methods
Attending physicians participating in this rotation will

1. Supervise and instruct the sub-specialty residents in accordance with the Supervision policy.
2. Provide sub-specialty residents with ongoing feedback regarding the progression of skills.

Evaluation Process: At the conclusion of each rotation.
Readings: As assigned.
Schedule: Please refer to master sub-specialty resident schedule.