

# RESEARCH POLICY AND GUIDELINES FOR RESEARCH PROJECTS

## OBJECTIVES

An understanding of research is an important aspect of training in medicine. Residents in emergency medicine should have a basic understanding of research so that they can critically evaluate the scientific literature for guidance in patient management or for the pursuit of academic endeavors. Training programs in emergency medicine have an obligation to provide residents with a foundation of research methodology to facilitate their growth, regardless of whether they participate in research after their residency.

By graduation, residents will acquire an understanding of the following:

- Hypothesis formulation and testing
- Study methodology
- Basic statistics
- Research ethics
- Organization and planning of research
- Manuscript preparation
- Abstract presentation
- Computers in research

## REQUIREMENTS

Each year residents will meet objectives specific to their level of training.

EMR Is:

- a. will attend all Journal Clubs (JC), except if on vacation, or on duty.
- b. will attend monthly Research and Biostatistics Lectures during Thursday Conferences.
- c. will read Volume One of the Scott and White/DEM Research Handbook, and complete the Learning Modules by the end of the Academic Year.
- d. will enroll patients in on going research projects.
- e. will formally present research project(s) idea(s) to the Research Director by 1 June of the AY.

EMR IIs:

- a. will attend all Journal Clubs (JC), except if on an out-rotation, vacation, or on duty
- b. will enroll patients in on going research projects.
- c. will attend monthly Research and Biostatistics Lectures during Thursday Conferences.
- d. will successfully complete the Administrative/Toxicology/Research Rotation (see below)
- e. will continue work on research project(s)
- f. will present their protocol or research project at the Annual Margaret J. Karnes Memorial Research Day

EMR IIIs:

- a. will attend all Journal Clubs (JC), except if on an out-rotation, vacation, or on duty
- b. will enroll patients in on going research projects.
- c. will attend monthly Research and Biostatistics Lectures during Thursday Conferences.
- d. will successfully complete the Administrative/EMS/Research Rotation (see below).
- e. will finish work on research project(s)
- f. will present their completed research project at the Annual Margaret J. Karnes Memorial Research Day

## **RESEARCH PROJECT**

A research project is required of each resident for successful completion of the residency. Suitable topics for a research project include but are not limited to topics in medical, surgical, pediatric, orthopedic, and gynecologic diseases. Projects may also address questions in resuscitation, emergency medical services, triage, pre-hospital care, and administrative aspects of emergency medicine. Completed projects should be submitted for publication to an appropriate journal; publication is not required.

The purpose of establishing deadlines is to ensure that each resident is progressing in a timely fashion with his or her respective project. This is particularly important for senior residents as department guidelines must be met before one can sit for the ABEM exam.

### **PROJECTS AND DEADLINES**

The following types of projects are acceptable:

- A. *One Original Research Project* (maximum 2 residents for credit): may be prospective, retrospective, clinical, or laboratory.
  1. topic accepted by 1 Jun of EMR I year.
  2. protocol completed and submitted by 15 Sep of the EM II year.
  3. presentation at the Annual Margaret J. Karnes Memorial Research Day.
  4. initial draft of complete paper by 1 Nov of the EM III year.
  5. final version by 1 Feb of the EM III year.

- B. *Any combination of two of the following:*

*Collective Review* (maximum 1 resident for credit): as defined by the Annals of Emergency Medicine.

1. topic accepted by 1 Jun of EMR I year.
2. literature review completed by 15 Sep of the EM II year.
3. initial draft of complete paper by 1 Nov of the EM III year.
4. final version by 1 Jan of the EM III year.
5. presentation at the Annual Margaret J. Karnes Memorial Research Day.

*Two Case Reports* (maximum 1 resident for credit).

	<u>First Case Report</u>	<u>Second Case Report</u>
1. topic accepted:	1 Jun EMR I	1 Jul EMR II
2. literature review completed:	15 Sep EMR II	1 Aug EMR III
3. initial draft completed:	1 Jan EMR II	1 Nov EMR III

4. final version  
completed: 1 Mar EMR II 1 Jan EMR III
5. presentation at the Annual Margaret J. Karnes Memorial Research Day.

C. A project approved by the Research Director.

1. project idea accepted 1 Jun of EMR I year.
2. project completed 1 Jan of EMR III year.
3. presentation at the Annual Margaret J. Karnes Memorial Research Day.

Additional residents may participate in projects as long as their own requirement is being or has been met.

### **IDEAS AND THE RESEARCH QUESTION**

In order to formulate a research project, one must first ask a question. In order to answer the question, one must perform a literature search. If the question is still unanswered, a research project may be needed. A study should then be planned and discussed with the Research Director or other faculty mentors prior to preparing a research protocol. Proper planning and discussion may eliminate the need for further protocol revisions. A DEM staff physician should serve as faculty advisor for resident research projects. Residents should present (and defend) their protocols at a Thursday Conferences prior to submitting their final protocol draft. The scheduling of this presentation will be coordinated with the Program Director/Assistant Program Director.

### **PROJECT APPROVAL**

Human use research protocols must first be approved through the DEM Research Committee. The protocol is then sent to the Scott and White Investigational Review Committee (IRC) and Institutional Review Board (IRB).

Residents are strongly encouraged to attend the DEM Scientific Review Committee Meeting when their research project is discussed. Research protocols must first be approved by the DEM Research Committee, the Research Director and the Chairman before being sent to the IRC and IRB.

### **PROJECT IMPLEMENTATION, CONCLUSION AND ANALYSIS**

Projects will begin immediately upon approval. All residents and staff are strongly encouraged to enroll patients in various studies.

### **PRESENTATIONS AND PUBLICATIONS**

Submission of research abstracts for oral or poster presentation at national meetings is strongly encouraged. Residents are also highly encouraged to submit their completed manuscripts for publication. The Research Director and Chairman must approve manuscripts *before* being submitted for publication or presentation.