

**UNIVERSITY OF MISSOURI-KANSAS CITY SCHOOL OF MEDICINE
INTERNAL MEDICINE RESIDENCY PROGRAM**

MEDICAL LITERATURE REVIEW FORM

Hospital: Truman Medical Center

Rotation: Medical Literature Review (Journal Club)

Responsible faculty: John Foxworth, PharmD

UMKC appointment: Yes

Other participating physicians: n/a

Duration (3 months is recommended): n/a

Is one month possible: n/a

Is three months possible: n/a

Any months not offered: No

Maximum number of residents at one time: n/a

Average number of inpatients: n/a

Average number of consults: n/a

Will any outpatient or office experience be included: n/a

List the conferences (name of conference, frequency) that the resident may attend: _____

Noon Conference

Give the schedule of a typical day (including times), include regular occurrences (other than conferences noted above): Journal Club presented at Noon Conference

7:00 am _____

8:00 am _____

9:00 am _____

10:00 am _____

11:00 am _____

12:00 noon Noon Conference

1:00 pm _____

2:00 pm _____

3:00 pm _____

4:00 pm _____

5:00 pm _____

What procedures will the resident actually perform (if capable): _____
n/a

Assist: _____
n/a

Observe only: _____
n/a

Are there any procedures that the resident will not be permitted to perform: _____
n/a

Will the resident have primary patient responsibility: _____
n/a

Will the resident be permitted to perform the initial examination of the patient (new admission or consult), and initiate therapy: _____
n/a

Additional information or comments:

Approved: _____

Title: Program Director _____ Date: _____

08/06/02

**UNIVERSITY OF MISSOURI-KANSAS CITY SCHOOL OF MEDICINE
INTERNAL MEDICINE RESIDENCY PROGRAM**

MEDICAL LITERATURE REVIEW FORM

Hospital: Saint Luke's Hospital

Rotation: Medical Literature Review (Journal Club)

Responsible physician(s): Donald Campbell, M.D.

UMKC appointment: Yes

Other participating physicians: n/a

Duration (3 months is recommended): n/a

Is one month possible: n/a

Is three months possible: n/a

Any months not offered: No

Maximum number of residents at one time: n/a

Average number of inpatients: n/a

Average number of consults: n/a

Will any outpatient or office experience be included: n/a

List the conferences (name of conference, frequency) that the resident may attend: _____

Noon Conference

Give the schedule of a typical day (including times), include regular occurrences (other than conferences noted above): Journal Club presented at Noon Conference

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5:00 pm _____

What procedures will the resident actually perform (if capable): _____
n/a

Assist: _____
n/a

Observe only: _____
n/a

Are there any procedures that the resident will not be permitted to perform: _____
n/a

Will the resident have primary patient responsibility: _____
n/a

Will the resident be permitted to perform the initial examination of the patient (new admission or consult), and initiate therapy: _____
n/a

Additional information or comments:

Approved: _____

Title: Program Director _____ Date: _____

08/061/02

UNIVERSITY OF MISSOURI-KANSAS CITY SCHOOL OF MEDICINE
INTERNAL MEDICINE RESIDENCY PROGRAM

GUIDELINES FOR JOURNAL CLUB

**(provided by John Foxworth, PharmD, of the Clinical Pharmacology Section,
Department of Medicine and School of Medicine, and
Donald Campbell, MD, Chairman of the
Department of Medicine at Saint Luke's Hospital)**

Introduction:

Journal club meets for one hour each month from noon to one o'clock pm (except July and August, when the Emergencies in Medicine Series takes place each day). Residents are encouraged to attend. The session convenes in the medical school for the residents rotating at Truman Medical Center –Hospital Hill, and the Executive Board Dining Room for the residents rotating at Saint Luke's Hospital. Copies of the articles to be discussed are distributed at resident's morning report several days before journal club, and are available in the Internal Medicine residency office as well.

Goals:

The goal of this conference is to provide residents with an ongoing and cumulative experience in the critical evaluation of the medical literature over the resident's three-year tenure. Articles will be chosen by the journal club director from current papers published in major medical journals (Annals of Internal Medicine, New England Journal of Medicine, etc.) that illustrate principles of study design and that appear to be useful clinically as well.

Objectives:

1. To provide residents with a practical experience in actively discussing, presenting and evaluating important journal articles on a monthly ongoing basis.
2. To prepare residents for medicine board questions bearing upon matters of article evaluation, basic statistical analysis and methodology, recent therapeutic advances, etc.
3. To keep residents abreast of pharmacological advances through articles in the medical literature, as well as discussing the strengths and weaknesses of the studies.
4. To provide residents with insight regarding current articles which may provide guidance for them as they care for their patients in hospital and clinic.
5. To introduce the resident to various references discussing issues of critiquing medical literature.
6. To provide residents with access to the faculty member who directs journal club on an ongoing basis for questions, concerns, and advice.
7. To provide residents with models of various study protocols, including prospective, randomized, blinded designs, case control studies, retrospective designs, meta-analysis, etc.
8. To provide residents with guidance in grading studies and in assigning a "level of evidence" based on design.

9. To provide residents with guidance pertaining to practical statistical issues, such as, Type I (alpha) errors, Type II (beta) errors, common statistical errors, common statistical tests and references, the power calculation, problems in analyzing negative studies, problems in proper randomization, maintaining blindness, etc.
10. To provide residents with a core curriculum in the above issues developed over three year's time.
11. To emphasize concepts of practicing "evidence-based medicine" based on the journal club experience.
12. To provide residents with a faculty model actively evaluating current relevant articles and to prepare and encourage the residents to do so for themselves after leaving the training program.

Methods/TMC-Hospital Hill:

A single article as described above will be selected several days in advance by the preceptor each month. The preceptor will lead an interactive discussion/critique: residents are expected to enter the dialog and contribute. All residents are expected to read the entire article before attending, and to develop their own thoughts regarding validity, design, etc. Appropriate references have been provided in the Residency Office.

Methods/Saint Luke's Hospital:

The Internal Medicine Residency coordinator assigns two residents on rotation at Saint Luke's to present the monthly Journal Club. Before the 5th of each month four copies are made of the table of contents of each of the previous months':

- New England Journal of Medicine (4 issues)
- Annals of Internal Medicine (2 issues)
- Archives of Internal Medicine (1 issue)
- Journal of the American Medical Association (4 issues)

The assigned residents meet with the preceptor at Saint Luke's Hospital. Each resident will select two journal articles to present at the monthly Journal Club. Alternatively, residents can provide two titles and the citation from other journals within two days of their meeting. The Internal Medicine Residency Coordinator will obtain the articles from the Medical Library. Copies are provided to the residents the Monday prior to Journal Club.

Philosophy:

The Residency Review Committee states that "conferences should include a journal club that emphasizes a critical appraisal of the medical literature." Although the objectives for the Journal Club conferences are identical on the TMC-Hospital Hill (School of Medicine) campus, the structure and the format of Journal Club is intentionally different on the two campuses. At the Medical School, a single article is discussed and the experimental design, statistical methods, etc. are reviewed/discussed in detail. This contrasts with the format at SLH where four articles are reviewed each month. Since each resident attends approximately one-half of the monthly Journal club

conferences at each site (5 per year at the Medical School, 5 at SLH) the integrated approach assures that each resident a) receives sufficient didactic instruction focusing on details of experimental design, statistical analysis, etc., and b) is personally involved in the review of a sufficient number of articles. Although different, the combination of these two formats provides each resident with the experience, background, tools, and ability to critically evaluate medical literature.

Suggested readings:

A. Recommended articles: (may be checked-out from the residency office at TMC-West)

1. Cuddy PG, Elenbaas, J. Three-part article appearing in *Ann Emerg Med*. 1983.

Part 1: Abstract, introduction, methods. 12:549-55.
Part 2: Statistical analysis. 12:610-20.
Part 3: Results and discussion. 12:679-86.

2. Gaddis G, Gaddis M: Six-part article titled introduction to Biostatistics appearing in *Ann Emerg Med* in 1990.

Part 1: Basic concepts 19:86-9.
Part 2: Descriptive statistics 19:309-15.
Part 3: Sensitivity, specificity, predictive value, and hypothesis testing 19:591-7.

Part 4: Statistical inference techniques in hypothesis testing 19:820-5.
Part 5: Statistical inference techniques for hypothesis testing with nonparametric data 19:1054-9.
Part 6: Correlation and regression 19:1462-8.

3. Evidence-based medicine working group/User's guide to the medical literature. Seven-part article appearing in *JAMA*.

Part 1: 1993;270:2093-5.
Part 2: 1993;270-2598-2601.
Part 3: 1994;271:59-63.
Part 4: 1994;271:389-91.
Part 5: 1994;271:703-7.
Part 6: 1994;271:1615-9.
Part 7: 1994;272:234-7.

4. Moher D., Schulz KF, et al. The CONSORT statement: revised recommendations for improving the quality of reports of parallel-group randomized trials. *Ann Intern Med*. 2001;134:657.

5. Altman DG, Schulz KF, et al. The revised CONSORT statement for reporting randomized trials: explanation and elaboration. *Ann Intern Med.* 2001;134:663-94.
6. Debanne S. Making the numbers tell the truth. *Gastrointest Endosc.* 2000;52:811-12.
7. Debanne S. Planning of clinical studies. *Gastrointest Endosc.* 2001;53:144-5.
8. Debanne S. Planning of clinical studies: experimental studies. *Gastrointest Endosc.* 2001;53:271-2.
9. Debanne S. Planning of clinical studies: random and not so random assignments. *Gastrointest Endosc.* 2001;53:404-5.
10. Guyatt G, Schunemann H, et al. Grades of recommendation for antithrombotic agents. *Chest.* 2001;119:3S-7S.

B. Recommended books:

1. Gelbach SH. *Interpreting the medical literature.* 3rd ed. New York: McGraw-Hill, Inc., 1993.
2. Reigelman RK, Hirsch RP. *Studying a study and testing a test. How to read the medical literature.* 2nd edition. Boston: Little, Brown and Co., 1989.
3. Fletcher RH, Fletcher SW, Wagner EH. *Clinical epidemiology. The essentials.* 2nd ed. Baltimore: Williams and Wilkins, 1988.
4. Sackett DL, Haynes RB, Guyatt GH, Tugwell P. *Clinical epidemiology: A basic science for clinical medicine.* 2nd ed. Boston, MA: Little, Brown & Co., 1991.
5. Bailar JC, Mosteller F. *Medical uses of statistics.* 2nd ed. Boston, MA. NEJM books, 1992.
6. Spilker B. *Guide to Clinical Trials.* New York, NY Raven Press, 1991.
7. Glantz SA. *Primer of Biostatistics.* New York, McGraw-Hill, Inc. 1992.
8. Sackett DL, Richardson WS, et al. *Evidence-based medicine. How to practice and teach EBM.* 2nd ed. New York, NY. Churchill Livingstone, 2000.

08/6/02