

# **Physical Medicine and Rehabilitation University of Toronto Rotation Specific Goals and Objectives Journal Club**

As part of the RCPSC Physiatry Residency Program requirements, a longitudinal experience is required. This rotation however, is part of a larger research exposure and experience, within the program. The overall goal of the experience, as a whole, is to assure that the resident has been introduced to the scope of research and the knowledge, skills and attitudes, as well as the concepts of critical appraisal, all of which would be fundamental to consideration of or embarking upon a career which involves health research.

## **General Requirements**

- To develop the necessary knowledge and skill required to utilize published research in an evidence-based Physiatry practice
- To demonstrate proficiency of this knowledge and these skills to successfully complete the Royal College Fellowship Examinations

## **Medical Expert**

By the end of the Journal Club participation the resident will be able to:

- Demonstrate knowledge of the relevant medical information inherent to the research question.
- Demonstrates an understanding of the disease/condition, current management, appropriate outcomes, related literature, and rationale for study

## **Communicator**

By the end of the Journal Club participation the resident will be able to:

- Clearly present the findings of a study (written or oral)

## **Collaborator**

By the end of the Journal Club participation the resident will be able to:

- Communicate with the resources available; for example, the library staff to gather the articles necessary for the completion of the systematic literature review
- Communicate clearly, concisely and effectively with Journal Club supervisor in order to choose the most appropriate article for presentation at the journal club, attend regular meetings to discuss the article's content
- Consult effectively with other physicians and health care professionals, related to research pursuits

- Demonstrate methods of effectively integrating with a health care team based upon the new information obtained from the literature review and article that was critically appraised.

## **Leader**

By the end of the Journal Club participation the resident will be able to:

- Utilize personal resources effectively to balance professional and non-professional activities.
- Work effectively and efficiently to achieve a suitable presentation by the stated date
- Utilize information technology to optimize research endeavors and life-long learning
- Show an understanding of basic principles of management of the medical topic related to the research article that is being critically appraised.
- Perform managerial and administrative functions in an efficient and organized fashion. This involves maintaining the focus of discussion on the presented topic and allowing all areas of the presentation to have adequate time for discussion. Enable a balanced approach to the topic and recognize and discuss bias appropriately.
- Acknowledge the increased strains of health care economics, which has also affected research as a domain

## **Health Advocate**

By the end of the Journal Club participation the resident will be able to:

- Identify the important determinants of health affecting patients
- Contribute effectively to improved health of patients and communities
- Recognize and respond to those issues where advocacy is appropriate
- Recognize the best interest for subjects/participants involved in research.
- Demonstrate concern that research subjects have access to appropriate supports, information, and services.
- Demonstrate sensitivity to special issues of gender, culture and social bias in dealing with research subjects
- Discuss the role of national organizations in shaping public policy on care for persons with disabilities, and the prevention of disability and specifically how potential or completed research could influence such organizations
- Promote a heightened awareness of the challenges and abilities of persons with disabilities as demonstrated by completed research or by proposal of research to be undertaken

## **Scholar**

By the end of the Journal Club participation the resident will be able to:

- Demonstrate a working familiarity with the fundamentals of research experimental design such as basic experimental design, clinical trial design, including cohort studies, cross sectional studies, case controlled studies, observational studies, case series and case reports in addition to randomized controlled trials
- Explain the distinction between random allocation and randomization and the implications of each
- Generate research questions having gained experience in hypothesis generation
- Perform an effective critical appraisal of the literature, including the levels of evidence that is afforded by different types of studies

- Demonstrate a working familiarity with the common biostatistical tests and be able to describe an approach to acquiring knowledge or information about any statistical tests, which are less familiar
- Explain the importance of medical and research ethics.
- Perform a focused systematic review of pertinent literature by the use of standardized search engines
- Present the focused literature review
- Critically appraise sources of medical information
- Incorporate the critically appraised articles into the literature review
- Provide clinical pearls, possible changes to clinical practice, based upon the critically appraised article and systematic literature review
- Clearly identify the difference between statistical and clinical significance.
- Present information in a formal setting and defend such a presentation and discussion
- Demonstrate understanding and behavior consistent with acceptance of the need for continuing health education
- Gather the articles necessary for the completion of the systematic literature review
- Develop, implement and monitor a personal continuing education strategy.
- Demonstrate understanding of critical appraisal as applied to review of the rehabilitation literature and basic research methodology
- Demonstrate an ability to incorporate gender, cultural and ethnic perspectives in research methodology, data presentation and analysis
- Teach effectively in a variety of settings and to diverse groups of learners such as students, residents, physicians, allied health professionals
- Accurately assess professional and personal strengths and weaknesses and make changes in behaviour where necessary
- Demonstrate a commitment to life-long self-directed learning and the application of new information to clinical practice using the principles of evidence based medicine
- Provide a concise presentation that covers the critically appraised article and systematic literature review. Implicit within this is to provide a “motivating statement” about the article and topic to generate interest from the audience.
- Use appropriate presentation skills (e.g. easy to hear, good intonation, few or no distractors [e.g. um, er] slides easy to read, slides made sense and were organized logically, faced the audience and made good eye contact, encourages audience participation)
- Maintain timelines for the presentation (e.g. start on time and end on time)
- Encourage audience participation

## Professional

By the end of the Journal Club participation the resident will be able to:

- Demonstrate a commitment to research, as well as to their profession and to society through ethical research practice
- Recognizes ethical conduct in the treatment of human or animal research subjects.
- Exhibit appropriate personal and interpersonal professional behaviours
- Recognizes potential conflict of interest to research in such areas as funding sources, truth-telling, consent, confidentiality, resource allocation, and research ethics
- Display attitudes commonly accepted as essential to professionalism

- Continually evaluate one's abilities, knowledge and skills, and know the limitations of professional competence