

Organiser: Chapter of Orthopaedic Surgeons
Organising Chair: Adj Assoc Prof Ernest Kwek
Event: Singapore Principles and Practice of Clinical
Research Course
Date: 16 September 2017
Venue: The Learning Studio, Level 5
Lee Kong Chian School of Medicine
11 Mandalay Road, Novena Campus, Singapore 308232



Invited Faculty

Prof Mohit Bhandari, McMaster University, Ontario, Canada

Canada Research Chair in Musculoskeletal Trauma

Assoc Prof Brad Petrisor, McMaster University, Ontario, Canada

Residency Program Director

Course Details

This course covers the principles of clinical research, research study design, practical aspects of clinical trials, health statistics, disseminating clinical research, and an introduction to the principles of basic science and bench work. This program will provide participants with a comprehensive foundation in the present state of health research methodology by covering basic science methods, evidence based-medicine principles, levels of evidence, research ethics, funding opportunities, as well as data management and budgeting.

A module will also be dedicated to clinicians interested in teaching and mentoring residents in research through educational activities.

In addition to the official program, this course offers opportunities to meet experts in the field and establish relationships with other colleagues. The program also includes multiple integrated panel discussions and focuses on resident research.

Target Audience

This course is open to all orthopaedic surgery residents and faculty. Non-orthopaedic residents, nursing or allied health staff with a keen interest in gaining a foundation in clinical research are also welcome to register.

Topics

Module 1: Research Education

Principles of Research Education
Teaching Evidence Based Medicine On The Fly
Running an Evidence Based Journal Club
Being a Good Research Mentor
Engaging Residents in Research

Module 2: Principles of EBM

Hierarchy of Evidence
Basic Science Research
Survey Design and Execution
Randomised Controlled Trials
Meta-analysis
Economic Analysis

Module 3: Practical Applications

Language of EBM/ Critical Appraisal
Practical Statistics
How to Prepare a Good Study Protocol
Roles of a Research Coordinator
Conducting a Cohort and RCT
Obtaining Ethics Approval
Budget Basics
Data management: Design and Data Collection
Barriers to Research and Solutions

Module 4: Completing the Cycle of Research

A Resident's Experience with Research
Writing a Publishable Paper: Practical Tips
Case Study: Manuscript Submission to Revisions to Publication
Knowledge Translation: Getting the Word Out/ Presentation Skills
Case Study: From Idea to Completion of a Large Clinical Trial