

DEPARTMENT OF ANESTHESIOLOGY,
PERIOPERATIVE MEDICINE & PAIN MANAGEMENT

OPERATIONS RESEARCH FOR SURGICAL SERVICES COURSE MIAMI, FL JUNE 1- 4, 2017

Courtyard Miami Coconut Grove

For hotel reservations call 1-888-249-3819
or call the hotel directly at 305-858-2500

PURPOSE OF COURSE is to teach participants how to apply principles of operations research to solve problems in the operating room and perioperative environment:

- Monitoring operational and financial performance of surgical suites and anesthesia groups (“descriptive analytics”)
- Forecasting case durations, time remaining in cases, use of staffed OR time (“predictive analytics”)
- Applying principles of operations research to make common decisions, such as staffing levels, block time planning, case scheduling and assignment, financial management, and strategic planning (“prescriptive analytics”)
- Identifying in-house expertise to aid in problem-solving and determining whether outside consultants are needed
- Evaluating current decision–support systems

CASE STUDIES completed in groups are an integral part of the course. All teams include both clinicians and analysts. Many of the case questions include electronic literature searching using publicly available materials. The cases help participants learn which techniques should be applied to different types of problems, how best to present results to hospital stakeholders, and leadership principles for team-based OR management decision making.

WACHEL RE, DEXTER F. Curriculum providing cognitive and problem-solving skills for anesthesia systems-based practice. *ACGME Journal of Graduate Medical Education* 2: 624-632, 2010

WACHEL RE, DEXTER F. Difficulties and challenges associated with literature searches in operating room management, complete with recommendations. *Anesthesia & Analgesia* 117: 1460-1479, 2013

DEXTER F, VAN SWOL LM. Influence of data and formulas on trust in information from journal articles in an operating room management course. *Anesthesia & Analgesia Case Reports* 6: 329-334, 2016

INTENDED AUDIENCE includes anesthesiologists, CRNAs, nurse managers, surgeons, hospital engineers and other analysts responsible for the organization and delivery of surgical care. Participants should have knowledge of middle/high school level algebra, Excel functions, and basic statistics (e.g., Student's t-test). The course is designed to be especially relevant to engineers and analysts from other fields preparing to work in anesthesia/ORs.

CREDIT FOR COURSE COMPLETION: The University of Iowa Carver College of Medicine designates this live activity for a maximum of 35 AMA PRA Category 1 Credits™. The Miami School of Nursing and Health Sciences designates 35 CEU credits. *Physicians and nurses should claim only the credits commensurate with the extent of their participation in the activity. Course completion is required for CME/CEU credit.*



COURSE SCHEDULE

www.FranklinDexter.net/education.htm

DAY 1

- 8:00 AM Use of economically ordered priorities to make patient flow decisions
Lecture is based on the following reference article:
Dexter F, Epstein, RH, Traub RD, Xiao Y. Making management decisions on the day of surgery based on OR efficiency and patient waiting times. *Anesthesiology* 101: 1444-1453, 2004
- 11:30 AM Group problem solving and lunch
- 1:00 PM Incorporating uncertainty into decision-making
- 3:45 PM Group complete cases
- 6:00 PM Discussion of cases

DAY 2

- 8:00 AM Allocating OR time operationally (few months before day of patient care)
Lecture is based on the following reference article:
McIntosh C, Dexter F, Epstein RH. Impact of service-specific staffing case scheduling, turnovers, and first-case starts on anesthesia group and operating room productivity: tutorial using data from an Australian hospital. *Anesthesia & Analgesia* 103: 1499-1516, 2006
- 10:15 AM Allocating OR time tactically based on utilization (1 yr before day of patient care)
Lecture is based on the following reference article:
Wachtel RE, Dexter F. Tactical increases in OR block time for capacity planning should not be based on utilization. *Anesthesia & Analgesia* 106: 215-226, 2008
- 11:30 AM Group problem solving and lunch
- 1:00 PM Allocating OR time tactically based on financial and strategic criteria:
Lecture is based on the following reference article:
Dexter, F Ledolter J, Wachtel RE. Tactical decision-making for selective expansion of operating room resources incorporating financial criteria & uncertainty in sub-specialties' future workloads. *Anesthesia & Analgesia* 100: 1425-1432, 2005
- 2:45 PM Groups complete cases
- 5:30 PM Discussion of cases

DAY 3

- 8:00 AM Economics of small reduction in OR times and turnover times
- 10:15 AM Financial impact of differences among hospitals
Lecture is based on the following reference article:
Wachtel RE, Dexter F, Lubarsky DA. Financial implications of a hospital's specialization in rare physiologically complex surgical procedures. *Anesthesiology* 103: 161-167, 2005
- 11:00 AM Group problem solving and lunch
- 1:00 PM Empirical methods for staffing and assignments
Lecture is based on the following reference article:
Dexter F, Epstein RH. Optimizing second shift OR Staffing. *AORN Journal* 77: 825-830, 2003
- 2:30 PM Physician agreements: Anesthesia institutional support and surgeon block time
Lecture is based on the following reference article:
Dexter F, Epstein RH. Calculating institutional support that benefits both the anesthesia group and hospital. *Anesthesia & Analgesia* 106: 544-553, 2008
- 4:15 PM Group complete cases

DAY 4

- 8:00 AM Discussion of cases from preceding day
- 9:30 AM Differentiating among hospitals and surgical practices
Lecture is based on the following reference article:
Wachtel, RE, Dexter F. Differentiating among hospitals performing physiologically complex operative procedures in the elderly. *Anesthesiology* 100: 1552-1651, 2004
- 10:45 AM Groups complete cases
- 11:55 AM End of course
Optional 1 hour open discussion and lunch



RESERVATIONS: 1-888-249-3819 or call the hotel directly at 305-858-2500. For travel questions, e-mail gconnor@med.miami.edu or call (305) 585-7037, option #3.

OPERATIONS RESEARCH FOR SURGICAL SERVICES COURSE

MIAMI, FLORIDA JUNE 1- 4, 2017 (THURSDAY – SUNDAY)

First Name: _____

Last Name: _____

Title: _____

Degree(s): _____

Organization: _____

Mailing Address: _____

City: _____

State (Province): _____ Postal Code: _____

Mobile phone during course: _____

E-Mail (write clearly) _____

How did you hear about the course? _____

PLEASE ANSWER THE FOLLOWING QUESTIONS TO ASSIST IN GROUP ASSIGNMENTS:

Will you be bringing a laptop computer with Excel 2007 or later, which you use regularly? YES NO

Have you ever participated in the decision to move a surgical case from one OR to another? YES NO

Have you ever participated in a decision influencing physician recruitment? YES NO

Have you ever performed linear programming, used Monte-Carlo simulation such as @Risk or Crystal Ball or, created a quality control chart with limit lines? YES NO

Have you ever studied statistics more advanced than the prerequisite knowledge? YES NO

*Material on which questions are based:
Dexter, F, MMasursky, D, Wachel, RE, Nussmeier, NA.
Application of an online reference for reviewing basic
statistical principles of operating room management.
American Statistical Association:
Journal of Statistics Education 18(3), 2010*

INSTRUCTOR IS
FRANKLIN DEXTER, MD, PHD, PROFESSOR
University of Iowa

COURSE FEE: External participants will be assessed a registration fee of \$2,250/person. This will cover the cost of lunches and breaks. UM/Anesthesia personnel, consisting of faculty and nurses, will not be assessed a registration fee.

There is a \$150 fee for cancellation up to 7 weeks before the course starts, \$500 up to 2 weeks before the course the course and \$1,000 afterwards.

SEND CHECK PAYABLE TO: The University of Miami
MEMO AREA: Department of Anesthesiology

MAIL TO: Garla L. Connor
University of Miami Department
of Anesthesiology
1611 NW 12 Avenue
Central Building, Suite #300
Miami, Florida 33136

E-MAIL REGISTRATION
FORM TO: gconnor@med.miami.edu

The course site is the COURTYARD MIAMI COCONUT GROVE. For accommodations, call contact reservations at 1-888-249-3819 or contact the hotel directly at 305-858-2500. Identify that you are calling for the UM MILLER SCHOOL OF MEDICINE MEETING ROOM BLOCK so that the operators know to book you under the block with the contracted rate.

Participants can fly into either Miami International Airport (MIA) and Fort Lauderdale-Hollywood International Airport (FLL), which are served by multiple airlines (including American, Delta and United Air-lines). Ground transportation is accessible via local taxi, Uber and/or Lyft.

For travel questions, e-mail gconnor@med.miami.edu or call (305) 585-7037, option #3.

The University of Iowa Roy J. and Lucille A. Carver College of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The University of Miami School of Nursing and Health Studies is accredited by the Florida Board of Nursing, Provider #52105 to provide continuing education units for nurses.