

HARVARD MEDICAL SCHOOL JOINT PROGRAM IN NUCLEAR MEDICINE

COURSE OUTLINE 2008/2009

Course Title: Computers in Nuclear Medicine 2008/2009

**Course Instructor(s)
& Contact Information:** J. Anthony Parker, Course Director
Tony_Parker@BIDMC.Harvard.edu
Larry Barbaras, Larry_Barbaras@BIDMC.Harvard.edu
Kevin J. Donohoe, Kevin_Donohoe@BIDMC.Harvard.edu
Fred H. Fahey, Frederic.Fahey@Childrens.Harvard.edu
Oleg S. Pianykh, OPianykh@BIDMC.Harvard.edu
Bob Zimmerman, Zimmer@BWH.Harvard.edu

Objective(s): The goal of the computer course is to demystify computer operation and to provide specific information relevant to the use of computers in nuclear medicine.

Criteria for Successful Completion of This Course

1. Attendance at 80% of the lectures.
2. Complete homework.

Textbook(s):

1. Pianykh OS: Digital Imaging and Communications in Medicine (DICOM): A Practical Introduction and Survival Guide. Springer, 2008.
2. Society of Nuclear Medicine: Basic Science of Nuclear Medicine. CD ROM. SNM, 2001.
3. Holman BL, Parker JA: Computer-assisted cardiac nuclear medicine. Little Brown, Boston, 1981.
4. Royal HD, Parker JA, Holman BL: Basic principles of computers. in Sandler MP, Patton JA, Coleman RE, Gottschalk A, Wackers FJTh, Hoffer PB: Diagnostic Nuclear Medicine. Williams & Wilkins, Baltimore, 1996, pp 93-119
5. J. Anthony Parker, MD PhD, Jerold W. Wallis, MD, James R. Halama, PhD, Charles V. Brown, MD, Trevor D. Craddock, PhD, Michael M. Graham, MD PhD, Elizabeth Wu, MLIS, Douglas J. Wagenaar, PhD, Gina L. Mammone, Robert A. Greenes, MD, B. Leonard Holman, MD: Collaboration using Internet for the Development of Case-based Teaching Files: Report of the Computer and Instrumentation Council Internet Focus Group. J Nucl Med 1996; 37:178-184.
6. Larry Barbaras, BS, J. Anthony Parker, MD, PhD, Kevin J. Donohoe, MD, Gerald M. Kolodny, MD: The All-Digital Department Moves to the Web. RSNA ej July/August, 1996.
7. B. Leonard Holman, MD, Gina L. Mammone, BS, Robert A. Greenes, MD, PhD, J. Anthony Parker, MD, PhD: BrighamRAD: An Approach to Education, Decision Support, Information Dissemination, and Collaboration via the World Wide Web. RSNA ej July/August, 1996.

Course Title: Computers in Nuclear Medicine 2008/2009

- Lecture Location(s):**
1. BIDMC: Beth Israel Deaconess Medical Center, Nuclear Medicine, East campus
 2. Hollenberg: Hollenberg Conference Room, Thorn Building, 3rd floor
 3. CHB: Children's Hospital Boston, Nuclear Medicine

Course Schedule

Time: 8:00 – 9:00 AM

Day	Date	Location	Topic	Instructor	Reading/Assignment
Wed	1/7/2009	BIDMC	Introduction	Parker	
Wed	1/14/2009	BIDMC	DICOM & PACS	Pianykh	Reference 1
Wed	1/21/2009	BIDMC	Hardware	Parker	
Wed	1/28/2009	BIDMC	Software	Parker	
Wed	2/11/2009	BIDMC	Homework	Parker	Spreadsheet / HTML
Wed	2/18/2009	BIDMC	Compartmental Analysis	Parker	
Wed	2/25/2009	CHB	Image Registration	Fahey	
Wed	3/4/2009	BIDMC	Image Processing	Palmer	
Wed	3/11/2009	BWH Hollenberg	Computer Aspects of Nuclear Medicine / PET Imaging	Hainer	
Wed	3/18/2009	BIDMC	Powerpoint & Photoshop	Donohoe	
Wed	3/25/2009	BIDMC	Database	Parker	
Fri	4/3/2009	BWH Hollenberg	Where's the Data?	Zimmerman	
Mon	4/6/2009	BIDMC	Hardward Demonstration	Parker	

Additional Notes: