“PRINCIPLES OF CLINICAL PHARMACOLOGY” COURSE

2009-2010 SCHEDULE

All sessions will meet Thursday evenings from 6:30 p.m. to approximately 7:45 p.m. in the NIH Clinical Center, Building 10, in the Lipsett Amphitheater in Bethesda, Maryland.

Course Web Site: http://www.cc.nih.gov/training/training/principles.html

September 3rd  Introduction to course  J. Lertora (NIH CC)

MODULE 1: PHARMACOKINETICS:

September 10th  Clinical pharmacokinetics  J. Lertora (NIH CC)
September 17th  Chemical assay of drugs and drug metabolites  S. Markey (NIH NIMH)
September 24th  Compartmental analysis of drug distribution  J. Lertora (NIH CC)
October 1st   Drug absorption and bioavailability  J. Lertora (NIH CC)
October 8th   Use of positron emission tomography (PET) in pharmacokinetics  R. Innis (NIH NIMH)
October 15th  Effects of renal disease on pharmacokinetics  J. Lertora (NIH CC)
October 22nd  SPECIAL LECTURE: Pharmacokinetics in patients requiring renal replacement therapy  A. Atkinson (Northwestern Un.) and G. Susla (MedImmune, Inc.)
October 29th  Noncompartmental vs. compartmental approaches to PK analysis  P. Vicini (Pfizer, Inc.)
November 5th  Effects of liver disease on pharmacokinetics  J. Lertora (NIH CC)
November 12th  Population pharmacokinetics  R. Miller (Pfizer, Inc.)

MODULE 2: DRUG METABOLISM AND TRANSPORT:

November 19th   Pathways of drug metabolism  S. Markey (NIH NIMH)
December 3rd  Drug Interactions  S. Penzak (NIH CC)
December 10th  Pharmacogenomics  D. Flockhart (IUPUI)
December 17th  Biochemical mechanisms of drug toxicity  L. Pohl (NIH NHLBI)
January 7th SPECIAL LECTURE: P-glycoprotein and drug transport  M. Gottesman (NIH OIR) and R. Innis (NIH NIMH)
January 14th  Equilibrative and concentrative drug transport  J. Ware (Genentech, Inc.)

MODULE 3: ASSESSMENT OF DRUG EFFECTS:

January 21st  Dose response and concentration response analysis  J. Lertora (NIH CC)
January 28th  Disease progression models and clinical trial simulation  D. Mould (Projections Research, Inc.)
February 4th  Physiological and laboratory markers of drug effect  J. Woodcock (FDA)

MODULE 4: OPTIMIZING AND EVALUATING PATIENT THERAPY:

February 11th  Drug therapy in pregnant and nursing women  M. Fredericksen (Northwestern Un.)
February 18th  Developmental and pediatric pharmacology  J. van den Anker (Children’s National Medical Center)
February 25th  Drug therapy in the elderly  D. Abernethy (U.S. Pharmacopeia)
March 4th  Quality assessment of drug therapy  C. Daniels (UCSD)
March 11th  Clinical analysis of adverse drug reactions  C. Chamberlain (NIH CC)

MODULE 5: DRUG DISCOVERY AND DEVELOPMENT:

March 18th  Drug discovery  E. Sausville (Un. of Maryland Medical System)
March 25th  Pre-clinical drug development  C. Takimoto (Centocor R&D, Inc./Johnson & Johnson)
April 1st  Animal scale up and Phase I studies  R. Dedrick (NIH NIBIB) and J. Collins (NCI NIH)
April 8th  Role of the FDA in guiding drug development  C. Peck (CDDS, UCSF)
April 15th  Design of clinical drug development programs  C. Breder (FDA)
April 22nd  Development of biotechnology products and large molecules  P. Garzone (PD3G Consulting)