INTRODUCTION TO GENOMIC MEDICINE

Genomics play a role in 21st century research and clinical practice and Washington University School of Medicine is at the forefront of this evolving field. To continue to meet this challenge, a new cadre of investigators will need comprehensive training in topics related to genomic medicine.

A new seminar series is scheduled for this spring which offers a practical background in molecular biology and genetics, an introduction to genomic research and applications of genomic technologies in the research environment, and an understanding of the clinical application of gained knowledge. The content will be delivered by Washington University faculty and there will be plenty of opportunities for questions and discussion. Make sure to arrive early and get a good seat!

Tentative Schedule:

INTRODUCTION
January 31  Implications of Genomics in Clinical Medicine
February 7  Molecular Biology/Genetics Refresher - 1
February 14 Molecular Biology/Genetics Refresher - 2
February 21 The Genetic Basis of Disease
February 28 Introduction to Biostatistics & Introduction to Statistical Genomics
March 7  Tissue banking & Consent

GENOMIC TECHNIQUES & ANALYSIS
March 14    Whole Genome Sequencing and Analysis & Emerging Sequencing Technologies
March 21   Copy Number Variation
March 28   Genotyping Technology and Gene Expression Analysis
April 4    Common/Rare Variance
April 11   Genomes and Genome Browsers
April 18   Proteomics and Mass Spectrometry & Metabolomics
April 25   Epigenetics

CLINICAL APPLICATION
May 2  Clinical Trials - design, resources
May 9  Biomedical Informatics
May 16  Pharmacogenomics
May 23  Susceptibility Genetics
June 6  Cancer Genomics
June 13  Genomics of Microbes and Microbiomes
June 20  Panel discussion on 21st century medicine: Where do we go from here?

WHEN:
Monday afternoons, 4-6:00p.m.
January 31 - June 20, 2011

WHERE:
Wohl Auditorium

WHO CAN ATTEND?
This lecture series is designed for clinicians and other interested persons, including basic science researchers, fellows, post doctoral scholars, and anyone else who wishes to learn more about these topics.

HOW CAN I LEARN MORE?
Email holmeskr@wustl.edu or visit www.becker.wustl.edu/GenomicMedicine to sign up for the mailing list

This seminar series is a collaboration between the Department of Medicine, Becker Medical Library, the Department of Genetics, the Department of Pediatrics and the Department of Pathology and Immunology and is sponsored by the Washington University Institute of Clinical and Translational Sciences