

Biotechnology-Based Human Diagnostics (BCHB-529)

SPRING 2008 – 2 Credits

Dan Hartmann, PhD, hartmand@georgetown.edu, 202-687-1669, Med-Dent 201NE

Vasna Nontanovan, MS, vn5@georgetown.edu, 202-687-6136, BSB 307

Lectures: Wednesdays 9:30 – 11:00 am, BSB 341

Labs: Wednesdays 11:00 am – 1:30 pm, PCS LD4/6

	Class		Subject
	Lecture 1		Introduction to Biotechnology-Based Human Diagnostics and Lab Overview
	Lecture 2		Clinical Significance of Hereditary Breast Cancer
	Lecture 3		Diagnosis of Lymphoma
	Lecture 4		Tissue Micro Arrays: Technology & Applications in Human Disease Diagnostics
	Lecture 5		Diagnostics of Oncogenic Viruses
			Spring Break
	Lecture 6		Human Papilloma Virus Detection of Cervical Cancer
	Lab 1A		Immunohistochemistry (IHC) for Oncogene Screening of Human Tumor Biopsies
	Lecture 7		Laser Capture Microdissection in Prostate Cancer Diagnostics
	Lab 1B		Immunohistochemistry (IHC) for Oncogene Screening of Human Tumor Biopsies
	Lecture 8		Mass Spectrometry and Proteomics: A New Disease Diagnostic Tool
	Lab 2A		Use of Polymerase Chain Reaction (PCR) to Detect Causes of Infectious Diseases
	Lecture 9		Advances in Human Genome Analysis
	Lab 2B		Use of Polymerase Chain Reaction (PCR) to Detect Causes of Infectious Diseases
	Lecture 10		FISH Technology in Breast Cancer Markers Detection
	Lab 3		FISH Technology, Part 1
	Lecture 11		Business-Related Biotechnology Topic
	Lab 3		FISH Technology, Part II
			Exam