

Date	Topic	Lectures	Time	Instructors
9/14/2018 (Columbia)	Basic Principles of Genetics & Dysmorphology	Introduction to dysmorphology Family history, inheritance, pedigree interpretation, Bayesian analysis - intro	1:00-2:30 2:45-4:30	Ken Corning, MS Angie Lichty, MS Amy Dobson, MS
10/5/2018	Basic Principles of Genetics	Basic diagnostic lab technologies: Cyto Basic diagnostic lab technologies: Molecular Basic diagnostic lab technologies: Biochemistry Online resources and web tools with demos	1:00-1:55 2:00-2:55 3:00-3:55 4:00-5:00	Barb DuPont, PhD Raymond Caylor, PhD Tim Wood, PhD Fatima Abidi, PhD
11/2/2018	Clinical Dysmorphology	Fetal pathology Ventral body wall malformations Neural tube defects	1:00-2:00 2:15-3:15 3:30-4:30	Roger Stevenson, MD Roger Stevenson, MD Roger Stevenson, MD
12/7/2018	Molecular and Cytogenetics	Organization of genes into chromosomes and chromosome structure & function Intro to cytogenetics - nomenclature & aneuploidies Characterization, organization and purpose of genes	1:00-2:00 2:15-3:15 3:30-4:30	Barb DuPont, PhD Barb DuPont, PhD Jenny Lee, PhD
1/4/2019	Molecular	Interpretation of sequence variants Trinucleotide repeat conditions Chromosome anomalies	1:00-2:00 2:15-3:15 3:30-4:30	Julie Jones, PhD Fatima Abidi, PhD Barb DuPont, PhD
2/1/2019	Molecular and Cytogenetics	Mosaicism and X-inactivation Epigenetics: imprinting, UPD and other mechanisms Single Gene Disorders	1:00-2:00 2:15-3:15 3:30-4:30	Jenny Lee, PhD Julie Jones, PhD Ray Louie, PhD
3/1/2019	Molecular and Cytogenetics	NextGen sequencing and whole exome sequencing Microarrays	1:00-2:45 3:00-4:45	Mike Friez, PhD Barb DuPont, PhD
4/5/2019	Cytogenetics	Sex determination and differentiation Sex chromosome aneuploidies and FISH Microdeletion syndromes	1:00-2:00 2:15-3:15 3:30-4:30	Barb DuPont, PhD Barb DuPont, PhD Barb DuPont, PhD
5/3/2019	Prenatal Genetics	Prenatal Screening and Counseling	1:00-4:00	Winn Surka, MS
5/17/2019		Exam 1	1:00-4:00	

9/6/2019	Cancer Genetics, Part 1	Genetic Basis of Cancer; Genetic pathogenesis and predisposition to malignancies; Natural History of Common Cancers	1:00-2:00	Elliot Stolerman, MD
		Hereditary Cancer Syndromes and Treatment Approaches	2:15-3:15	Elliot Stolerman, MD
		Cancer Genetic Counseling: Pedigrees and Risk Assessment	3:30-4:30	Hannah Warren, MS
10/4/2019	Cancer Genetics, Part 2	Cytogenetics of Cancer Molecular Diagnosis of Cancer	1:00-2:30 2:45-4:45	Barb DuPont, PhD Matt Tedder
11/1/2019	Biochemical Genetics, Part 1	Intro to Metabolism	1:00-2:00	Neena Champaigne, MD
		Disorders of Protein metabolism	2:00-3:00	Neena Champaigne, MD
		Disorders of Carbohydrate metabolism	3:00-4:00	Neena Champaigne, MD
		Disorders of Fat/cholesterol metabolism	4:00-5:00	Tim Wood, PhD
12/6/2019	Biochemical Genetics, Part 2	Lysosomal storage disorders	1:00-2:30	Laura Pollard, PhD
		Mitochondrial disorders	3:00-4:45	Laura Pollard, PhD
1/10/2020 (Charleston)	Neurodevelopmental Genetics, Autism & Multifactorial disorders	Evaluation of the child with neurodevelopmental delays	TBD	Ken Holden, MD
		Clinical Features & Genetics of Autism		Mike Lyons, MD
		Multifactorial nature of human traits and principles of multifactorial inheritance		Sara Cathey, MD
2/7/2020	Functional Genomics	Model organisms & functional genetics	1:00-3:30	Richard Steet, PhD & Heather Flanagan-Steet, PhD
		Metabolomics	3:45-5:00	Tim Wood, PhD
3/6/2020 (Greenville)	Treatment	Enzyme Replacement Therapy	1:00 -2:00	Curtis Rogers, MD
		Emerging treatments for genetic disorders	2:15 - 4:15	David Everman, MD
4/3/2020	Population Genetics	Bayesian Analysis	1:00-3:00	Hannah Warren, MS
		Population Genetics	3:00-5:00	Amy Lawton-Rauh, PhD
5/1/2020	Ethical Issues in Genetics	Ethical Issues in Genetics	1:00 - 4:00	Kellie Walden, MS Hannah Warren, MS Lori Bassett, MS
5/15/2020		Exam 2	1:00-4:00	