



***Methods in Personal Genetics and DNA Barcoding:
DNA Sequencing, PCR, and Taq Supply Chain Production***
Santiago Canyon College, Orange, California June 7–9, 2023

Wednesday June 7	8:30 AM	Coffee	Registration and sign-in
	9:00 AM	CONCEPT	Workshop Introduction and Experiment Flow
	9:30 AM	LAB	DNA Barcodes: Plant and Food DNA Isolation DNA Barcodes: Commercial PCR
	10:30 AM	Break	
	10:45 AM	LAB	Human DNA Isolation Human Mt DNA: Commercial PCR
	12:00 PM	Lunch	
	1:00 PM	LAB	DNA Barcodes: Gel Electrophoresis Human Mt DNA: Gel Electrophoresis
	3:00 PM	CONCEPT	Prepare positive PCRs for sequencing Taq Polymerase Supply Chain
	3:30 PM	LAB	SimpleTaq Production: Overnight Culture
	4:30 PM	Dismiss	
Thursday June 8	8:30 AM	Coffee	
	9:00 AM	LAB	SimpleTaq production: Taq Isolation
	10:00 AM	Break	
	10:15 AM	CONCEPT	The Dynamic Genome and Human <i>Alu</i> Insertion Polymorphism
	11:00 AM	LAB	Human <i>Alu</i> Insertion: Commercial vs. SimpleTaq PCR Human PTC SNP Polymorphism PCR
	12:00 PM	Lunch	
	1:00 PM	LAB	Human PTC SNP Polymorphism Restriction Digest Human <i>Alu</i> Insertion: Gel Electrophoresis
	1:30 PM	ANALYSIS	Human <i>Alu</i> Insertion: Bioservers Population Genetics
	2:30 PM	LAB	Human PTC SNP Polymorphism Gel Electrophoresis
	3:00 PM	CONCEPT	DNA and Senses
4:00 PM	ANALYSIS	Human PTC SNP Polymorphism Genotype-Phenotype Analysis	
5:00 PM	Dismiss		
6:00 PM	Dinner	Night Out on DNALC	
Friday June 9	8:30 AM	Coffee	
	9:00 AM	CONCEPT	What DNA Says About Our Human Family
	10:00 AM	Break	
	10:15 AM	ANALYSIS	Human Mt DNA: Single Nucleotide Polymorphisms Population Diversity and Ancient Ancestors
	12:00 PM	Lunch	
	1:00 PM	CONCEPT	DNA Barcoding and Examples of Student Projects
	2:00 PM	ANALYSIS	DNA Barcodes: DNA Subway Analysis
	3:30 PM	DISCUSSION	Implementation and Reagent Support
4:00 PM	Dismiss		