Introduction to Genetics

Geralyn (Geri) AndersonSaxton

(702)727-7553

Ralphngeri@gmail.com

1. Introduction: Video. What is Genetics?

2. The main Characters: Deoxyribose, Ribose, Nitrogen Bases, Phosphates
   Activity: Making DNA

3. Packaging DNA into Chromosomes; replicating DNA (mitosis)
   Activity: Extracting your own DNA

4. Meiosis: Making the next generation unique; inherited genetic diseases
   Activity: Crossing over

5. Mendel and Genes; human genetics
   Activity: Male or Female; Who’s your daddy?; blood types; pedigrees

6. The Central Dogma: From DNA to Protein (transcription and translation)
   Activity: The Genetic Code

7. Genomes; The Human genome project

8. Epigenetics

9. “10%” human: your microbiome; the future of genetics; genetics and cancer