



C² Pipeline

Wayne State University, College of Nursing C² Pipeline



Term Two Curriculum Training Agenda

Saturday, October 17th 9am-3pm

9am	Arrival & Welcome	Waterford Mott HS Cafe	Tansi & Don
9:15am	Human Genetic Variation	Waterford Mott HS Cafe	Amanda & Sandy
10:45am	Break		
11:00am	Curriculum Networking #1	Waterford Mott HS	Amanda
	<ul style="list-style-type: none"> Anatomy in Clay (Computer Lab 240) SAT Prep (Computer Lab 240) Need for Green Speed (fka Alt. Trans.) (Room 342) Chess (Room 342) Empowerment Improv (Room 332) Math Carnival (Room 332) 		
12:00pm	Lunch	Waterford Mott HS Cafe	Provided by C2P
12:30pm	Curriculum Networking #2	Waterford Mott HS	Amanda
	<ul style="list-style-type: none"> Rube Goldberg (Room 324) College & Finance (Computer Lab 240) Chemical Engineering (Room 324) Explore It, Design It (Room 324) Stem Busters (Room 332) STEM Debate (Computer Lab 240) Traumatic Brain Injury (Room 332) 		
1:30pm	Break		
1:45pm	Quad-copter Training	Waterford Mott HS	Jessie, Joe & Peter
2:45pm	Closing Remarks	Waterford Mott HS Café	Tansi & Don
3pm	Dismissal	Waterford Mott HS	Tansi & Don

HUMAN GENETIC VARIATION

C2 Pipeline Curriculum

Term Two Curriculum Training
Waterford Mott High School
Saturday, October 17th



Human Genetic Variation

- Need to Know – Facilitators

- Goals:

- Basic Scientific Principles related to HGV
 - Process of Inquiry
 - Enhanced Understanding of Nature/Method of Science
 - Recognize the Role of Science in Society
 - Relationship between Science and Personal & Public Health

- Teaching in Order (Lesson Plan Overview) HIGHLY SUGGESTED

- Where to Find Curriculum

- [Blackboard](#)

- Background Knowledge

- See “Activity Directions,” page 29

- How to Use Student Lessons

- See “Activity Directions,” page 15

- Using the Website

- See “Activity Directions,” page 17

Human Genetic Variation

- What Students SHOULD Already Know:
 - According to MI GLCE's for 7th Grade Science:
 - Life Science
 - Inherited and Acquired Traits
 - Reproduction

Human Genetic Variation

- Curriculum Overview
- 8 Weeks of Activities
 - Week 1 – Alike, But Not the Same
 - Week 2 – Gummy Bear Genetics
 - Week 3 – The Language of Life
 - Week 4 – The Meaning of Genetic Variation
 - Week 5 – Explore Sickle Cell Disease
 - Week 6 – Molecular Medicine Comes of Age
 - Week 7 – Are You Susceptible?
 - Week 8 – Making Decisions in the Face of Uncertainty

HGV

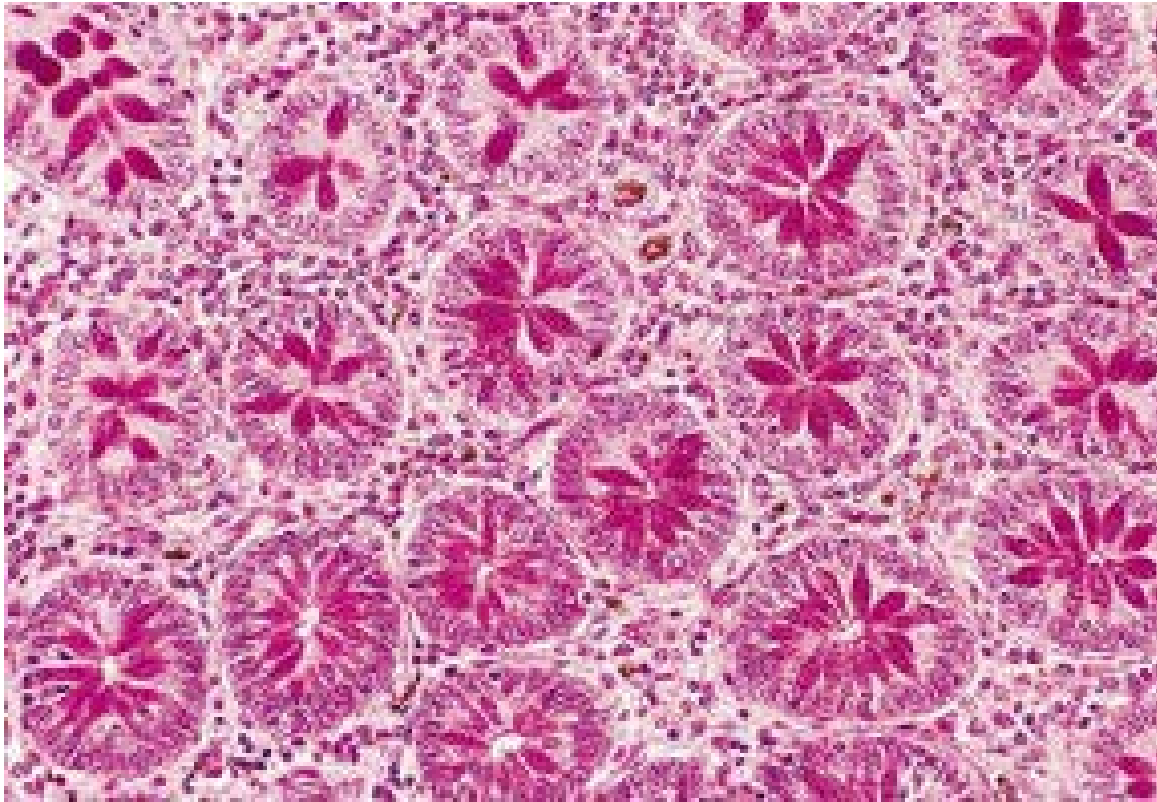
Alike, But Not the Same Things To Know

- Trait
 - Specific characteristic of an organism; can be inherited or acquired
- Genotype
 - A collection of genes; contributes to observable traits
- Phenotype
 - An individual's observable trait; scientific word for trait

Human Genetic Variation



Human Genetic Variation



Data Collection

- Lime Green – Sex
- Pink – Noses
- Purple – Height
- Salmon – Hair Color

of Traits = Uniqueness (Examples)

- (Freckles)
- (Hitch Hiker Thumb)
- (Innie or Outie)

HGV

Gummy Bear Genetics

- Mendel's Punnett Squares







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