

# THIS WEEK IN BI 102

**TUESDAY LECTURE**



**Hominin**  
*Ancestors and distant relatives of Homo sapiens sapiens.*

**THURSDAY LECTURE**



**Modern Humans**  
*The impact of infectious diseases on human and parasite evolution.*

**RECITATION**



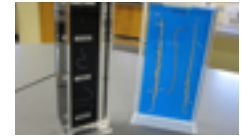
**Human Genetics**  
*Draw and analyze human pedigrees and review the human genome.*

**LABORATORY**



**Parasites and Human Evolution**  
*Worms, fungi, bacteria, viruses, and more.*

**ON-LINE READINGS**



**Flores Man; Guinea Worm**  
*The "Hobbit Man"; The possible end to a human disease.*



**Work Ahead for Tuesday's Lecture**

Read "[Flores Man](#)" and answer the following questions.

Where have *Homo floresiensis* fossils been found? \_\_\_\_\_

Describe the size of the skeleton and skull of this organism.

*Homo floresiensis* may have existed on Earth as recently as \_\_\_\_\_

**Work Ahead for On-Line Readings**

Read "[Guinea Worm](#)" and answer the following questions.

How do humans get Guinea Worm.

Describe what the worm does to the human host (its "exit strategy").

What is the good news related to Guinea Worm?



**Are alleles "good" or "bad?"**

**Find out how the same alleles may be both this week.**

**Work Ahead for Recitation**

Read over *Human Genetics* in the activity manual.

“Mendelian” traits are those that follow complete dominance patterns of inheritance, with a single gene determining a trait. From earlier in the term, how does this differ from incomplete dominance, codominance, and polygenic traits?

Where is a gene located for an **autosomal** trait? (question #1, p. 140)

**\* It is a good idea to complete the human pedigree portfolio assignment in class this week.**

**Work Ahead for Laboratory**

From *Parasites and Human Evolution* in the activity manual, answer the following questions.

What are the three main categories of bacteria (by shape)? (Station B, p. 146)

What is the name of the protist that causes malaria in humans? \_\_\_\_\_ (question #1, p. 147)

List three animals that can be **vectors**, transmitting infectious disease pathogens to humans (Station E, p. 148+).

**Portfolio #3 is due next Monday, Mar 2.** Portfolios can be turned in early, Thursday or Friday this week, 133 Weniger



**Crickets**

*The crickets still look healthy (not impacted by hall lights) and will remain in the lab window until Friday afternoon.*



**Science is Tentative & Durable Portfolio Assignment**

*The display case outside of Lesley’s office (125A Weniger can be helpful.*

**Genetics Review**

For the remainder of BI 102, we are revisiting Genetics, in the context of human evolution, foods, and diseases.

**Genetics Review**

Which of these is a **homozygous** genotype: AA or Aa?

What is the **phenotype** of an organism?

What are the **gametes** produced by a parent with genotype **DdIiBb**?

What difference between human chromosomes leads to **sex-linked** traits?

Eye color is not a simple **Mendelian** trait, it is \_\_\_\_\_, impacted by multiple genes.

In the nature vs. nurture debate, **nature** refers to \_\_\_\_\_ impacts.

**Genetics Review**

A **nucleotide** consists of sugar, phosphate, and one of four \_\_\_\_\_.

In a **DNA** macromolecule, A=T and G=\_\_\_\_\_.

\_\_\_\_\_ is the process of assembling **mRNA** copy of a portion of DNA.

Most human cells have a **2N** of \_\_\_\_\_ chromosomes.

**Sperm and eggs** are produced by the process of \_\_\_\_\_.

**Cancer** is characterize by excessive \_\_\_\_\_ of cells.

To help recall the relevant information covered earlier this term these two review sheets (with answers) are on display in the recitation room hall window this week.