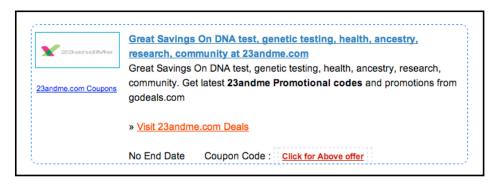
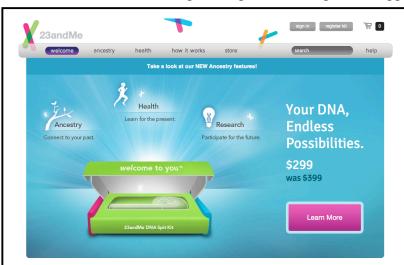
## 23andme Project

There are now several consumer genetic testing services available. For example, 23andMe (<a href="https://www.23andme.com/">https://www.23andme.com/</a>) gives you a statistical analysis of your likelihood of developing everything from



arthritis to heart disease and rating of what percentage Neanderthal you are. They say their tests are <u>not</u> for diagnosis, yet they offer the odds that you will get Parkinson's or Arthritis. Plus there are coupons!

As a context for learning about genetic testing and its applications, implications, and limitations,



you will complete a multi-week "23andme Project." Specifically, you will apply the content you learn in class to a hypothetical but real-world decision: whether to have your DNA analyzed by 23andMe and for what purpose (health or ancestry).

You will complete a series of assignments that will help you make progress with this project, outlined here and also listed on the Genetic Testing Unit Calendar on eLC:

Assignment	<b>Due Date</b>	Points
Introduction to Genetic Testing Assignment	October 1 (in class)	3 points
23andme Background Assignment	October 3	5 points
Resource Summary Assignment	October 5	4 points
Resource Evaluation Assignment	October 12	6 points
Project Draft	October 15	10 points
Final submission	October 22	50 points

## **Project Instructions and Rubric for Review**

Your final submission is a **two-page report** of what decision you would make (to be genotyped or not to be genotyped, for health or ancestry purposes) and the scientific basis for your decision.

Your project should include the following elements:

- **Decision.** Express a clearly stated decision about whether you would be genotyped and for what specific purpose (e.g., I would be genotyped in order to determine if I have a genetic predisposition toward Hereditary Fructose Intolerance). **(5 points)**
- Rationale: Clearly explain the scientific basis for your decision. What is the evidence that genotyping will yield or not yield information useful for the purpose you have in mind? For example, what is the genetic basis for Hereditary Fructose Intolerance? And what information would I get from a genotype test that would help me know if I have a predisposition toward this condition? (15 points)
- Opposing rationale: Clearly explain the scientific basis that someone might use to make the opposite decision from the one you have made. (10 points)
- Evidence: Include evidence in the form of at least two (2) references that pass the CRAP test. At least one (1) reference should support your rationale and one (1) reference should support the opposing rationale. Clearly explain how each reference supports each rationale. Be sure to cite your references in a scholarly format, as outlined here: <a href="http://library.osu.edu/help/research-strategies/cite-references/cse/">http://library.osu.edu/help/research-strategies/cite-references/cse/</a> (10 points)
- **Reflection:** Answers the following questions: (10 points)
  - 1. Would you use your genotyping information to take any actions? If so, what actions? If not, why not?
  - 2. What issues did you encounter through the process of doing this project, e.g., while finding or evaluating resources?
  - 3. How did you weigh opposing evidence when making your decision?
  - 4. What skills have you developed while doing this project?
  - 5. How do you anticipate using these skills in your life?
- Don't forget to put your name, ID number, and group number on your report!