

# FAMILY TREE:

## ENVIRONMENTAL AND GENETIC ANALYSIS OF THE PAST, PRESENT, AND YOUR FUTURE

- 1) **Tree:** Research the environmental and genetic medical conditions present in your family. Use the attached template to organize medical information about each family member.

Include in your tree:

- Yourself, siblings, parents, grandparents, great parents or farther if you can. If you do not live with your genetic family, you may record the people you currently live with.
- Include the date of birth (DOB) and the date of death (DOD), or if the person is still alive, write "present".
- Include all medical conditions for each family member (i.e. heart disease, high blood pressure, high cholesterol, specific cancers, allergies, diabetes, asthma, drug/alcohol addiction, down syndrome, mental health conditions, etc). \*\*
- For all deceased family members, **highlight** the cause of their death.

*\*\* Please note this information is for your education only. This information is not shared with anyone and is based solely on learning about the environmental and genetic factors that might influence your health.*

- 2) **Analysis:** Create an informational brochure for you and your family based on the equation "Environment + Genetics + Choices = Health." Choose one prominent medical condition that your research uncovered about your family, or if you find limited medical conditions within your family tree, explain the connection between being healthy and the equation.

**Cover (page 6): Introduction** to the medical condition

**Inside (page 1):** What kinds of **Environmental** factors correlate to your family's health?

**Inside (page 2):** How strong of a role does **Genetics** play in this medical condition?

**Inside (page 3):** What **Choices** are currently being made or have been made that put family members at greater risk for this medical condition?

**Inside (page 4): Application-** What can you and/or your family do right now to reduce the risk of the medical conditions within your family's background or maintain the pattern of good health? Your researched suggestions must clearly state what lifestyle factors have been proven to decrease your risk of that medical condition.

*Example:* a pattern of colon cancer will be reduced by eating a diet that includes 15-25 grams of fiber per day (not dietary fiber supplements), increase intake of ACE vitamins, stop smoking, reduce alcohol intake, work day-shifts, and get annual colon screenings within 10 years prior of a relative being diagnosed.

**Back (page 5): Family Homework-** Share this brochure with 2 family members and have them record one piece of information that was helpful for their health and have them sign their name.

**Resources-** Bibliography in MLA format on research

Great Grandparent  
DOB-DOD  
Medical Issues

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DOB-DOD  
Medical Issues

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Grandparent  
DOB-DOD  
Medical Issues

Grandparent  
DOB-DOD  
Medical Issues

Grandparent  
DOB-DOD  
Medical Issues

Parent/Guardian  
DOB-DOD  
Medical Issues

Parent/Guardian  
DOB-DOD  
Medical Issues

YOU!  
DOB  
Medical Issues

Sibling  
DOB-DOD  
Medical Issues

Sibling  
DOB-DOD  
Medical Issues

Sibling  
DOB-DOD  
Medical Issues

Sibling  
DOB-DOD  
Medical Issues

# Family Tree Grading Rubric /50

|  |   |  |  |   |
|--|---|--|--|---|
| <b>Tree</b><br>(10pts)                           | 1-3<br>Incomplete-<br>Info, difficult<br>to understand  | 3-6<br>Minimal info on either environ.<br>or genetic issues, little<br>clarity on family | 7-8  | 9-10<br>Exceeds standards-<br>easy to follow, very<br>thorough info, beyond expectation   |
| <br><b>Brochure:</b>                             |   |  |  |   |
| <b>Introduction</b><br>(10pts)                   | 1-3<br>Incomplete<br>discussion of medical<br>issue   | 3-6<br>Basic detail<br>on medical condition  | 7-10<br>Exceeds standards-<br>Complete description<br>of medical condition from multiple sources |   |
| <b>Environment</b><br>(5 pts)                    | 1<br>Incomplete-<br>Environmental factors<br>lacks detail,<br>grammatical errors                  | 2  | 3<br>Basic info on environmental<br>factors, fairly organized                                    | 4   |
| <b>Genetics</b><br>(5 pts)                       | 1<br>Incomplete<br>info on genetics role<br>to the health issue                                   | 2  | 3<br>Basic genetic connection<br>to the medical condition  | 4   |
| <b>Choices</b><br>(10 pts)                       | <b>&amp; Application</b> 1<br>Lack of effort & detail<br>on life choices link to<br>medical issue | 2  | 3<br>Meets standards, but<br>limited detail on<br>family choices                                 | 4   |
| <b>Family</b><br><b>Communication</b><br>(5 pts) | 1<br>Incomplete-<br>no helpful<br>information or family<br>communication                          | 2  | 3<br>and helpful information &<br>signature  | 4   |
| <b>Bibliography</b><br>(5 pts)                   | 1<br>Incomplete-<br>No bibliography<br>Or not cited correctly                                     | 2<br>One source  | 3<br>Followed rubric,<br>in MLA format, 2-3 sources  | 4   |
|  |   |  | 5  | 7<br>Exceeds standards- thorough<br>analysis of choices that impact the risks<br>for the medical condition and family<br>relationship |
|  |   |  | 5  | 8<br>Exceeds standards-<br>has helpful feedback<br>information & signatures<br>from 2 family members                                  |
|  |   |  | 5  | 9<br>Exceeds standards-<br>in MLA format, used<br>multiple sources  |
|  |   |  | 5  | 10  |