NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Your family has a history of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_genetic disease/disorder. You want to find out more information about the genetic disease/disorder to learn the cause, symptoms/effects, how it is diagnosed, treatments, and prognosis (future) in case your own children could be born with it or even develop it during their lifetime. Fill in the organizer below to help you in your research. You will then create an information brochure to be posted to let others know about that genetic disease/disorder so others can be informed as well.

|  |  |
| --- | --- |
| NAME OF GENETIC  DISEASE/DISORDER: |  |
| 1.CAUSE(S)—list and explain each in detail |  |
| 2.SYMPTOMS(effects)—list and explain each in detail |  |
| 3.TECHNIQUE(S) OR METHOD(S) TO DIAGNOSE—list and explain each in detail |  |
| 4.TREATMENT(S)—list and explain each in detail |  |
| 5.PROGNOSIS—what life span and life style the person has |  |
| 6.Interesting FACTS and  ADVANCEMENTS being researched |  |
| 7.SOURCES |  |

**Genetic disease/disorder information flyer requirements:**

Create a trifold (ONE page front and back) information brochure that will inform other students about the fictional genetic disease/disorder you have in your family. You must include images of an individual with the disorder if visible in their physical appearance i.e. Down’s syndrome, or the internal effects i.e. Chromosome karyotype, blood cell, organ deformity, etc.

Have a separate section devoted to CAUSE(S), EFFECT(S), DIAGNOSIS, TREAMENT(S), PROGNOSIS, Interesting FACTS/ADVANCEMENTS being researched, and SOURCES. You must include images with each as described above.

**Diseases/disorders that will be studied include**:

Muscular dystrophy Cri-du-chat syndrome

Tay-sachs disease Chronic mylogenous leukemia

PKU (phenylketonuria) Turner syndrome

Hemophilia Klinefelter’s syndrome

Huntington’s disease Edward’s syndrome

Down’s syndrome Patau syndrome

Sickle Cell anemia Cystic fibrosis

Achrondoplasia

**Diagnosis and treatment methods could include but are not limited to**:

Karyotype Gene therapy

Pedigree Genetic engineering

Human Genome project data DNA probe

Amniocentesis Cloning

Ultrasound Transgenics

Blood tests DNA fingerprinting

**SOURCES:** Do NOT use WIKIPEDIA other than for the references listed there. It would NOT be counted as a resource then since you are not using detailed information from the articles. You must have 5 information sources, and then pictures of each information category i.e. a person with the disorder, equipment used to diagnose, and treatment method. Include these sources on your information flyer.

**Possible sources:**

National Human Genome Research Institute <http://www.genome.gov/>

National Library of Medicine <http://www.nlm.nih.gov/>

Mayo Clinic <http://www.mayoclinic.com/>

Cleveland Clinic <http://my.clevelandclinic.org/default.aspx>

Howard Hughes Medical Institute <http://www.hhmi.org/>

Web MD <http://www.webmd.com/>

\*Other places to check would be other government sites (usually end with .gov), or University sites (usually end with .edu i.e. Stanford University)

\*Wikipedia does have a good “list of genetics research organizations” that can be helpful.

\*Search for organizations that raise funds for research and support families affected by the disease/disorder i.e. MDA (Muscular Dystrophy Association)

**CHECKLIST:**

\_\_\_\_\_One page tri-fold information brochure, front and back, created on Microsoft word, Google docs, or power point

\_\_\_\_\_Name of the disease/disorder in attractive font, larger size type on TITLE flap, ALSO has student name here

\_\_\_\_\_Brochure is colorful, organized, creative, font and type size is easy to read; 75% of space should be utilized with information and photos (should have more information than photos)

\_\_\_\_\_Brochure includes all 7 categories listed on the research page (including sources), in separate numbered & titled sections: information is documented and NOT plagiarized.

\_\_\_\_\_Include image(s) to illustrate a person showing external symptoms and/or internal effects on body parts/systems

(These should NOT show the external reproductive structures). Include photo captions to explain them.

\_\_\_\_\_Include image(s) of technology/equipment used to diagnose, treat the disorder; photo captions to explain them

\_\_\_\_\_Include image(s) of person in daily life situation for PROGNOSIS category

|  |  |  |
| --- | --- | --- |
| BACK/OUTSIDE of brochure--Last information section, Include photos | Sources with websites, additional photos/pictures to meet 75% coverage | TITLE flap with disease/disorder name, student’s name |
| INSIDE of brochure:begin information sections, number them 1-7; title them for ease of use and grading; use photos | Continue information sections,  include photos | Continue information sections,  Include photos |