

HHMI Activity 1 – Cancer Gene Cards

1. Look for the locations of the genes listed on the cards you have on the Human Chromosome sheets.
2. Once you locate a gene on the correct chromosome, place either a green or a red sticker in the first blank circle to the right of the location to indicate whether the gene is an **oncogene** (green) or a **tumor suppressor gene** (red). This information is found on the gene card.
3. In the second circle to the right of the location, place a colored sticker to indicate the function affected by the mutation in the gene. This information is also found on the gene card. Possible functions include: **Cell Survival** (blue), **Cell Fate** (purple) and **Genome Maintenance** (yellow). Please note: Some genes may have more than one function.
4. Next, move to the Classification of Cancer Genes area of the white board and draw a red or green dot in the appropriate column representing **Oncogene** (green) or **Tumor Suppressor** (red). Fill each row from bottom to top.
5. Next, move to the Functions of Cancer Genes area of the white board and draw a dot of the appropriate color in the column representing the cellular function of the gene. Fill each row from bottom to top.
6. When all the data is collected, take a few minutes to look at all the graphs and think about the data.
7. What are your observations about this data? Once you have written down your thoughts, discuss this as a group.
8. Write down three things you have learned.
 - a.
 - b.
 - c.
9. Write down two things that surprised or particularly interested you.
 - a.
 - b.
10. Write down one question that you still have.