

# CRISPR applications in cancer treatment

Group Name: 5101    Online Repository: <https://github.com/5101name/5101name.github.io>

Over the years, many scientists have thought about the possibility of altering the human genome to stop or treat deadly diseases, such as cancer. In 2012, Jinek et al. identified two significant discoveries which have led to further advancements within the field of bio-genetics. The first innovation is the decoding of the human genome, which has given scientists the chance to further understand how human genetics works and provides an understanding of DNA sequencing. The second innovation involves the use of the DNA editing technology CRISPR.

We have chosen to research the topic of ‘CRISPR applications in cancer treatment’ for various reasons:

- The topic we choose relates to our field of study within technology, but more importantly it is within our area of interest.
- The topic we choose is well studied and backed by various researchers and research institutes such as Harvard.
- The topic we choose aligns with our goal of some day being able to use this technology to cure cancer.

## Team Roles & Responsibilities:

Abdulmalik Alnasra (Team Leader) :

- ✓ In charge of researching the main topic and adding it under the “Technology/Topic” section of our website.
- ✓ In charge of writing the opportunities and adding it under the “Opportunities” section of the website
- ✓ Provide research material to the group.
- ✓ Overseeing the group progress along with the website completion.
- ✓ In charge of writing references.
- ✓ In charge of writing the recommendation, and adding it under the “Recommendation” section

Rafi Yusaf-Horsfall:

- ✓ In charge of writing and researching advantages using the research material Abdulmalik Alnasra provides or any academic sources and adding it under the “Advantages” section of the website.
- ✓ In charge of the website styling (CSS).
- ✓ In charge of the meeting minutes.
- ✓ Assist Abdulmalik Alnasra with research on the main topic.

Akshay Silswal:

- ✓ In charge of writing and researching disadvantages using the research material Abdulmalik Alnasra provides or any academic sources and adding it under the “Disadvantages” section of the.
- ✓ In charge of writing the conclusion.
- ✓ In charge of preparing the presentation.
- ✓ Assist Abdulmalik Alnasra with research on the main topic.

## Reference:

Jinek, M., Chylinski, K., Fonfara, I., Hauer, M., Doudna, J. A., & Charpentier, E. (2012). A Programmable Dual-RNA-Guided DNA Endonuclease in Adaptive Bacterial Immunity. *Science*, 337(6096), 816–821. <https://doi.org/10.1126/science.1225829>