

## Sharing his story with your students

### **Lesson: Making Headlines**

**Learning Goal:** Terry Fox has had a direct impact on cancer research as well as improved survival rates. In this lesson, students will analyze data from The Terry Fox Foundation and select an appropriate graph to show how Terry Fox has directly affected improvements in cancer research and survival.

### Materials/Media:

- Appendix A: Cancer Research: It's Working
- Appendix B: Data Management & Donations
- Appendix C: Graphing Terry's Success
- Access to graphing software and/or graphing chart paper

### Instructions:

- 1. Discuss cancer with the class. Explain as simply as possible what cancer is, and discuss how it has affected the class. ie, who knows someone who has had it etc.
- 2. Discuss the changes in cancer. What could have changed? How do you think success rates have changed?
- 3. Put statistics sheet up on Elmo, Smartboard etc and discuss the changes in cancer for both men and women since Terry was diagnosed.
- 4. Distribute print materials that include data discussed as a class. Hand out Appendix A and B as a guideline to help them with this activity.
- 5. Using data presented in class, students will present their findings and information on a graph they deem to be the best choice.
- 6. Remind students that their assignment guideline will remind them of the rules of graphing.
- 7. Students will either create the graph using graphing chart paper and/or graphing software.

**Extension:** Use publishing software to create a pamphlet for the Terry Fox Foundation to demonstrate data and statistics.

Assessment: Use Appendix C – Graphing Terry's Success to assess this assignment.

# **Appendix A: Cancer Research: It's Working**



### CANCER RESEARCH YOUR IMPACT



For millions of people worldwide Terry Fox is the face of cancer research. Your support has been vital to the progress we have made over the past four decades. In 2020, it feels like the world is in a holding pattern, waiting for the COVID-19 global crisis to end, but we know that cancer patients can't wait for this crisis to be over. Nor can the researchers who have made it their life's work to save lives. The Terry Fox Foundation is committed to continuing to fund cancer research programs this year with the support of Terry Foxers across Canada.

#### **RESEARCH INVESTMENT**

The Terry Fox Foundation continues to be a leading national investor in cancer research, directing \$26.6 million to its programs in 2018/19.

#### **CANCER STATISTICS**



Reference: 2019 Canadian Cancer Statistics



Nearly **1 in 2 Canadians** are expected to be diagnosed with cancer in their lifetime

### **IMPACTING PEOPLE**

#### Lawrence Traa – Defying the Odds

Five years ago, Lawrence Traa of Manitoba was watching television when he suddenly forgot the names of everyone he knew. Testing revealed a brain tumor – very similar to glioblastoma multiforme (GBM). There is currently no cure. Initially, Traa was given 2 years to live, but despite this prognosis he has surprised doctors, and is now in his sixth year of battling the disease. He was thrilled to learn that DNA repair biologist Dr. Sachin Katyal (CancerCare Manitoba, University of Manitoba) was recently awarded the TFRI New Investigator Award for his quick-to-clinic personalized medicine approach to better treat GBM patients. Dr. Katyal is analyzing resistant brain cancer tumour cells to determine what DNA-damaging enzyme repair proteins are allowing cancer cells to survive following chemotherapy and radiation treatments.

"Hearing about research like this being done in Manitoba brings brain cancer patients hope," Traa says. "When people donate it buys myself and future patients more time. The research is being sped up in such a good way, and that is very exciting!"

### **IMPACTING RESEARCH**

#### **Understanding Metastatic Sarcomas**

In 1980, Terry Fox's Marathon of Hope was cut short as he received the grim prognosis of metastatic sarcoma. The cancer that had taken his leg was back, and had spread to his lungs. Metastatic sarcomas are almost always resistant to therapy, and little is understood about them. This is because they cannot be surgically removed, meaning there are very few human samples of metastatic sarcomas.

Dr. Livia Garzia of the Research Institute of the McGill University Health Centre is hoping to change this, thanks to a recent New Investigator award from TFRI. This award will provide her with for the next three years to study how and why certain sarcomas metastasize. Dr. Garzia's hope is that by identifying early signs of metastatic dissemination she will be able to know what tumours are more at risk of becoming metastatic and find new treatments for children and young adults with these cancers.



Guided by Terry's wishes, our research spans a wide variety of cancer sites including prostate cancer, melanomas & leukemias pancreatic cancer, lung cancer & brain cancer.



#### TERRYFOX.ORG

# **Appendix B: Data Management & Donations**

Name: \_\_\_\_

Imagine you are canvassing for donations for the Terry Fox Foundation and need to put a presentation together asking for donations.

Using the data discussed in class, or information you have found on the Internet, decide what information would be best to be shown to potential donors to best show the improvement in cancer research statistics.

Select a graph that will best show your data. Remember to follow the rules of graphing:

> Label the X and Y axis Use a ruler

Use a legend when required Use a very specific title



## **Appendix C: Graphing Terry's Success**

Criteria	Level 4	Level 3	Level 2	Level 1
Follows Graphing Rules	My graph follows all of the graphing rules: has X and Y labels, a clear legend, straight lines and a clear and specific title.	My graph follows most of these graphing rules: has X and Y labels, a clear legend, straight lines and a clear and specific title.	My graph follows some of these graphing rules: has X and Y labels, a clear legend, straight lines and a clear and specific title.	My graph follows few of these graphing rules: has X and Y labels, a clear legend, straight lines and a clear and specific title.
Accurate Data	The information on my graph is very accurate and precise and correctly demonstrates true facts about the Terry Fox Foundation.	The information on my graph is accurate and precise, and correctly demonstrates true facts about the Terry Fox Foundation.	The information in my graph is somewhat accurate and precise, and demonstrates some facts about the Terry Fox Foundation.	The information in my graph is not accurate and precise, and does not accurately demonstrate facts about the Terry Fox Foundation.
Neatness and Accuracy	My graph is done neatly, data is graphed accurately and I have added eye catching colour and detail.	My graph is done neatly, and my data is graphed accurately.	My graph is completed with some neatness and my data is mostly accurate.	My graph is completed messily, and my data is sometimes inaccurate.

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