Medical Breakthroughs: The First Heart Transplant— A Graphic History

AUTHOR/ILLUSTRATOR

BRANDON M. TERRELL

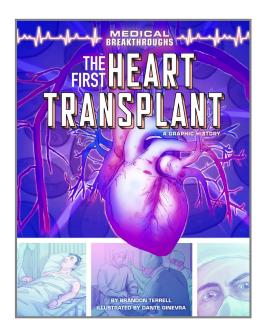
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RECOMMENDED FOR: Lower to Mid Secondary



SYNOPSIS

For centuries, people misunderstood how the heart works. As our knowledge grew, heart surgery remained a dangerous medical procedure. Even after organ transplants became common, surgeons struggled to transplant hearts and keep patients alive. But small groups of pioneering doctors attempted this difficult surgery, changing the lives of patients. This graphic history traces their leap forward and the medical world's newest advancements in heart-health technology. Learn about innovations such as artificial hearts and 3D printed living tissue.

ABOUT THE AUTHOR

Brandon M. Terrell was a talented storyteller, authoring more than one hundred books for children. He was a passionate reader, Star Wars enthusiast, amazing father and devoted husband.

ABOUT THE ILLUSTRATOR

Dante Ginevra is a comic artist, illustrator, art director and freelancer. He is based in Buenos Aires, Argentina.

STUDY NOTES

- Before reading, view the cover and title of the book. Identify the following:
 - The title
 - · The author
 - The illustrator
 - The publisher
 - The blurb.
- Based on the cover and title, what do you think this book is about?
- What are some of the facts you found most interesting about the history of heart transplants? As a class, or in small groups, discuss what you were most surprised or interested by in the book. Individually, write a short statement about the part of the book that was most interesting to you.
- In small groups, choose one surgeon, scientist, or patient who is featured in the book. Write a short biography of one or two paragraphs that culminates with their involvement with the history of heart transplants. You may need to do some additional research online.
- Have a class discussion about science and medicine. How have we arrived at a point where a procedure like a heart

transplant is possible? Discuss the scientific method, and see if you can identify places in the story where our medical capabilities were limited by our knowledge of the human body.

- This book begins and ends with images of a race being run. These images serve multiple roles in the book's discussion of heart transplants. How do they support the telling of the story of heart transplants? Are they serving the same purpose at the beginning and at the end of the book? Can you identify some literary techniques that are being used in relation to these images?
- In most graphic novels and comics, there is usually a white space between the panels called the gutter. Consider the difference between large and small panels, square and irregular shapes and full-page illustrations. Copy a page of the book, cut out the frames and arrange them on a piece of paper with a smaller gutter between each frame and then with a larger gutter. What difference does this make to our reading?
- Visual storytelling is the art of using images to convey a narrative. Compare *The First Heart Transplant* to another graphic novel. How does the visual storytelling differ in each? What techniques do the illustrators use to convey a particular mood?
- How has the illustrator, Dante Ginevra, used panel arrangement, colour and space to create a particular feeling? Look at the panel shapes in pp 4, 8, 12, and 28. What effect do these have on your reading of the story?
- Visit the websites provided in the 'Further Information' section at the end of the book, and try drawing one or two pages of your own graphic novel about some of the additional facts you learn about heart transplants. How can you use images to convey these facts in an exciting way?
- Read the 'Glossary' at the end of the book. How many of these words are unfamiliar to you? Look back through the book to check that you understand the context in which any new words were used.
- Write a book review of *The First Heart Transplant*. Include what you liked and disliked about it, who you think would enjoy it the most and whether you think the information provided is credible. Use persuasive language to make the reader understand your opinion.
- See if you can find another graphic novel in your library about real historical events. How are this graphic novel and *The First Heart Transplant* similar? How are they different? Do they use similar techniques to tell you their story? Why do you think that is?