

The Shot Heard Around the World

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Junior Division/Group Documentary

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With his non-patented polio vaccine, Jonas Salk conquered Polio. With his inactive vaccine, he prevented deaths and disabilities that had been produced by the Polio disease. We didn't know much about polio when we started looking into subjects. At first we thought of choosing Henry Ford because of all of the barriers he broke including the assembly line and his practice of paying everyone the same wage. We picked Jonas Salk, and the elimination of polio, because that made an incredible impact on history. Interestingly before our project was complete, the coronavirus made the fight against polio very timely.

Jonas Salk broke many barriers in his career. He and his colleagues found a vaccine for influenza, then developed the polio vaccine. No one knew what caused polio or how to stop it. The barriers it threw up seemed impossible to break. Salk broke through those barriers. He did not patent the vaccine which made it available at a reasonable cost. He defended his breakthrough, both against a company that didn't follow his instructions and another vaccine that was cheaper but more dangerous. Jonas Salk constructed the Salk Institute to break other medical barriers and for the "betterment of the world." This facility was a center for scientists to conduct experiments based on deadly diseases. Before he died he conducted research on AIDS, cancer, and multiple sclerosis.

We chose to do a documentary because of our interest in technology and cinematography. We believed we could use a documentary to educate others about the vaccine and polio. We found dozens of pictures and several primary videos. A former HD student who did a project allowed us to access her interviews with polio victims and a local doctor. We intended to interview the polio victim ourselves, but school was shut down. We were able to interview Peter Salk, Peter Salk's son. That was a great experience.

We started our project by getting an overall knowledge of Jonas Salk and the first Polio vaccine. We then went more in depth with the time period, and how life was in the early 1950's. We then watched interviews by former state and National History Day contestants with Dr. Alderman, a local physician who dealt with polio and local polio victims. Those interviews gave us a first-person idea about how terrifying polio was and what the polio vaccine really meant to people. We interviewed Peter Salk by face-timing him then screen-shot our interview. We learned the video-editing program, then built our video. Unfortunately, they closed our school before we had time to compress; then we lost all our sound. We redid the sound on a separate computer, then sent the sound to a central computer. We used zoom meeting and the screen capability so that we could all look at and make changes in our video. Lastly we found music that fit our story. This year's theme is breaking barriers. We broke some of our own barriers to get the project done.

Annotated Bibliography

Primary:

Alderman, Alan. Taped interview with Sarah Tweet and Caiden Lemmon. August 23, 2012.

This interview gave us an understanding of what it was like in the early 50s from the perspective of a doctor who had to deal with polio on an almost daily basis. He is now suffering from dementia so we couldn't interview him. The interview was great though.

Carter, Richard. *Breakthrough-the saga of Jonas Salk*. New York: Trident Press, 1966. Dr. Peter Salk suggested this book about his father. He said it was an excellent book and explained the steps his father used to solve the polio vaccine problem. It also explained the battle he had against the Cutter company and against Dr. Sabin and the live vaccine. The book said, Dr. Salk really disagreed to the live vaccine. Eventually his concern was shown to be true. This was an interesting book to read.

Chronicling America. chroniclingamerica.gov. (Accessed many times in the spring of 2020.)

Probably one of our most important sites. We were able to access dozens of newspapers that we were able to use on our documentary. These were so important because they gave the viewer a chance to see what others were seeing during the polio battle.

Eitemiller, Phyllis. Personal Interview with Cambrea Vogel. January 11, 2019.

Phyllis got polio when she was 15. She could only move her finger. Eventually She was able to get some movement back, but she said in the video that "polio is forever." She said she has had to fight the effects of polio her whole life. We had intended to interview her, but everything closed down so we couldn't do it.

"The End of Polio is in Sight at Last." *Life*. October 27, 1952.

We found several *Life* magazines that reported on the battle against polio. It was interesting to read about polio in "real time."

"Flu Report: Not Too Bad Yet, Worse Ahead." *Life*. November 18 1957.

This article reported on the flu epidemic of 1918, but we considered it primary, because it compared it to the battle against polio.

Hero's Great Discovery is Put to Work." *Life*. May 2, 1955.

This magazine contained pictures and a story about giving the polio vaccine to thousands of children across the nation. Again, these *Life* magazine gave us a "first-hand" understanding of the polio battle.

March of Dimes. March of Dimes Historical newsreel and March of Dimes documentary. 1959. YouTube.

<https://www.google.com/search?q=Youtube.+March+of+Dimes+newsreel&og=Youtube.+March+of+Dimes+newsreel&ags=chrome..69i57j69i64.7888j0j7&sourceid=chrome&ie=UTF-8> (Accessed February 27, 2020.)

We used a piece of the March of Dimes newsreel at the beginning of our documentary. It was easy to understand how scared people were of polio, particularly after watching these videos.

"Polio Epidemic—North Carolinians battle disease and build hospital at the same time." *Life*. August 30, 1948.

We chose to put this *Life* magazine on our bibliography because it was written before the battle against polio had made much headway. Again, this helped us understand what polio really was.

"Polio Fighter." *Time*. March 29, 1954.

We used this front cover in our video. We thought it explained without words how important Dr. Jonas Salk was considered to be.

Salk, Peter Dr. Taped interview with Wyatt Brady, Carter Rudloff, and Mitchell Knode. March 3, 2020.

It was pretty amazing to us that Dr. Salk was willing to let us interview him. We used facetime which allowed us to really get acquainted with him. He remembered the effects of the polio vaccine both personally and world-wide. We could have put most of what he said on the interview, but we just chose material that we felt supported our story. He told us stuff that we would have never found anything else. He also read our script and made sure that what we said was correct, like for example, many sites say that Dr. Jonas Salk was the one who decided to not patent the polio disease. Dr. Peter Salk said that no one really considered patenting the vaccine because it was "for the people."

Library of Congress. loc.com. (Accessed throughout spring of 2020.)

We were able to find many photographs and other material about polio and Dr. Jonas Salk at the Library of Congress.

Kahret, Peg. *Small Steps: The Year I Got Polio*. Morton Grove, Illinois: Albert Whitman and Company

This book showed us another inside look into the life of a polio survivor.

Newspapers.com. (Accessed throughout spring of 2020.)

This was another important site for us. We were able to find old newspapers at this site that allowed us to step back in time and see what those living in the period of the polio pandemic saw. We used many of the newspapers on our documentary.

“Research Guides Vaccine Production” *The Crawford Tribune*, Volume 70, April 5, 1957.

This was a newspaper that gave us a view of the time period. We used this to see how much different life was in 1957.

Salk, Jonas, Dr. et al. *A New Reality: Human Evolution for a Sustainable Future*. City Point Press, 2018.

This book gave us an inside experience of polio and how they eradicated it, but it also explained how Dr. Salk saw the world in the future and the steps he believed people would have to take to sustain the future.

“US Gets Set for Polio Vaccine.” *Life*. April 11, 1955.

We were able to look at several Life magazines from the polio time period, we chose several of them that we thought gave us a great idea about the fight against polio and how important it was.

Secondary:

“About Jonas Salk.” *Salk Institute for Biological Studies*,

www.salk.edu/about/history-of-salk/jonas-salk/.

This website gives a quick rundown of a timeline from Jonas Salk's life.

Beaubien, Jason. “Wiping Out Polio: How The U.S. Snuffed Out A Killer.” NPR, 15 Oct. 2012,

www.npr.org/sections/health-shots/2012/10/16/162670836/wiping-out-polio-how-the-u-s-snuffed-out-a-killer. (Accessed February 10, 2020).

This site gave us some statistics of the polio disease in its prime. It gave us an overall look on how bad polio was in the late summers in the early 1950's.

Copland, Aaron. "Down Country Roads." Youtube.com
We chose a portion of this music for our documentary.

Aaron Copeland. "Quiet City." Youtube.com
We used a portion of this music on our documentary.

"The Calling to Find a Cure". Academy of Achievement.

<https://web.archive.org/web/20150722025220/http://achievement.org/autodoc/page/sal0int-2> (Accessed February 2, 2020).

This site told us his point of view and showed us his devotion to the discovery of the vaccine. It was also a good source because it was very reliable and we could trust it. This site gave us a more in depth look at his life and showed his backstory. A quote from Salk "Some people are constructive, if you like. Others are destructive. It's this diversity in humankind that results in some making positive contributions and some negative contributions. It's necessary to have enough who make positive contributions to overcome the problems of each age." I believe this reveals that Salk was a man that really wanted to make as many positive contributions as he could.

Children's Hospital. "Parents PACK Personal Stories – Polio." *Children's Hospital of Philadelphia*, The Children's Hospital of Philadelphia, 4 Dec. 2014, www.chop.edu/centers-programs/parents-pack/personal-stories/polio. (Accessed February 17, 2020).

We used this site to give us a better idea of the time period. We used it to give us more information about hygiene and it showed us why polio appeared in the first place. This also showed us more information of why Jonas was chosen to make the vaccine.

"11 Facts about Polio" DoSomething.org.

<https://www.dosomething.org/us/facts/11-facts-about-polio> (Accessed February 9, 2020).

We used this site to give us more information about polio that we may not have known. It also showed us facts so we could know more and just have a better overall view of the disease. This site showed us that there were three types of polio. We learned from this because we thought before that there was only a single type.

Gaines, James. 19 fascinating pictures to remind us what polio used to look like.

<https://www.upworthy.com/19-fascinating-pictures-to-remind-us-what-polio-used-to-look-like> (Accessed February 7, 2020).

This showed us some photographs of early polio hospitals and treatment.

Hecht, Alan. *Polio*. New York: Chelsea House, 2009.

This book gave us an insight of all aspects of the disease and showed us some recent vaccination records. This book also gave us a better view of the dangers.

“History of Polio in Iowa.” Iowa Heritage Digital Collections,

www.iowaheritage.org/exhibits/show/polio1/polio2. (Accessed March 2, 2020).

There were some great pictures here that we used in our video.

“History of Polio.” Timeline | History of Vaccines.

www.historyofvaccines.org/timeline/polio (Accessed February 19, 2020).

This website gives us a timeline of the entire polio virus. This one of the most helpful sources for dates, and gave us an overview of the time.

“How much money did Jonas Salk Potentially Forfeit by not Patenting The Polio Vaccine?” Forbes. <https://www.forbes.com/sites/quora/2012/08/09/how-much-money-did-jonas-salk-potentially-forfeit-by-not-patenting-the-polio-vaccine/#751144e169b8> (Accessed February 5, 2020).

Why we liked this site: This site gave us a better understanding of why Salk refused to patent the vaccine. For example: Salk once answered in an interview when the interviewer asked him why he did not patent the vaccine he responded with “Can you patent the sun?”. I believe this shows the kind of man he is. He believed that if you can help someone and you have the opportunity to, you should always do it no matter what.

Jacobs, Charlotte DeCroes. "Vaccinations have always been controversial in America: Column", *USA Today*, (Accessed February 12, 2020).

We used this site to look at the controversy surrounding vaccines. Now and then vaccines were a very controversial topic. This also showed us how fast acting the disease was and how there was an outbreak so fast. It also showed us the importance of basic hygiene due to the fact that that was the heavily believed reason for the outbreak.

“Jonas Salk.” *Biography.com*, A&E Networks Television, 26 July 2019, (Accessed February 10, 2020).

This gave us a complete story or rundown of Jonas Salk’s life.

“Jonas Salk, M.D” Academy of Achievement.

<https://www.achievement.org/achiever/jonas-salk-m-d/#interview> (Accessed February 2, 2020).

We obtained information on what made Jonas Salk decide to research polio and make a cure. It all started after he joined a research group at New York

University to research influenza. He found out a way to deprive the virus which carried on to his polio research. We also liked this site because it made us realize that he wanted to help people and how he discovered how to introduce a kill virus vaccine. This site also showed us that Jonas Salk was a very optimistic man.

King, Lucas. *Dark Piano for Dark Thoughts*. Youtube.com

This music was eerie and dark, but it worked well at certain points in our documentary.

“Man Evolved”. Internet Archive. https://archive.org/details/openmind_ep1234
(Accessed February 3, 2020).

We found out how Jonas Salk discovered the vaccine. And it gave us more information. This site showed us Salk and his mind so we could understand the person he is.

Najera, Rene. “In Defense of the Common Anti-Vaxxer. *College of Vaccines of Philadelphia*. October 25, 2019.

We used this article, among many that we read about Anti-Vaxxers to try to understand why people don't want to vaccinate their children. This article included many different arguments against vaccinating children, but Dr. Peter Salk had told us that he and his wife had debated against vaccinating their son against whooping cough because there were side-effects. However, in the end, they vaccinated their child he said for the betterment of humanity.

1918 Pandemic (H1N1virus) *Centers of Disease Control and Prevention*.

<https://www.cdc.gov/flu/pandemic-resources/1918-pandemic-h1n1.html>
(Accessed February 25, 2020).

This site was very important to us because it gave us an overview of many different pandemics in the world. We felt we need to have a good solid understanding of other pandemics so we could better understand the polio pandemic.

Oshinsky, David M. *Polio: An American Story*. Oxford: Oxford University Press, 2005.

This book gave us an idea of why Jonas Salk and Isabell Morgan revolutionized the way people thought of vaccines.

Photographs: Accessed winter and summer of 2020.

We found photographs at a number of places. Some came from the Internet; some from magazines and newspapers: The Library of Congress, The University of California, The Denver Library, March of Dimes, Public Health, LA Times, *Life*, *Time*, Museum of Health Care, NETV, Nebraska Historical Society, University of Pennsylvania, Crawford Historical Society, University of Iowa, *Crawford Clipper*, Phyllis Eitemiller.

“Polio: The Deadly Summer of 1956.” *The Independent*, Independent Digital News and Media, 23 Oct. 2011, (Accessed February 10, 2020).

www.independent.co.uk/life-style/health-and-families/features/polio-the-deadly-summer-of-1y956-2117253.html.

This website gave us some background on the polio virus within a family letting us know their personal experiences with it.

A Science Odyssey. “Salk produces polio vaccine.” PBS.

<https://www.pbs.org/wgbh/aso/databank/entries/dm52sa.html> (Accessed February 7, 2020).

We liked this site because it showed us the symptoms of polio and how people can catch it. It also shows us the risk every person took from simply going outside. This website was very useful to us because it showed us the risk of life and gave us a better understanding of this.

Shell, Marc. *Polio and Its Aftermath: The Paralysis of Culture*. Cambridge, MA: Harvard University Press, 2005.

This book gave us the feeling of panic that many people experienced as polio spread throughout the world. It also combined the thoughts of a doctor and a book writer.

“UC San Diego Library Receives Personal Papers of Jonas Salk.” News Wise.

<https://www.newswise.com/articles/uc-san-diego-library-receives-personal-papers-of-jonas-salk> (Accessed January 31, 2020).

This website provided us information on Jonas Salk’s personal papers which consisted of professional and scientific activity. They had files relating to polio, writings, photographs, and artifacts. It reveals more about Salk’s character.

“Where Legacies Begin.” Salk Institute. <https://www.salk.edu/about/history-of-salk/> (Accessed January 27, 2020).

This site helped us get an overall look at the life of Jonas Salk. The article introduced Jonas Salk created the Polio vaccine, and followed his second plan of his life. To create a collaborative environment where researchers could get together and find important discoveries for the future of mankind.

Wilson, Daniel J. *Polio*. Santa Barbara, CA: Greenwood Press/ABC-CLIO, 2009.
This book showed us the reasons why polio was so serious and it showed us the cause of polio. This showed us a better understanding of the subject.

The World Health Organization. "Weekly epidemic Health Organization.
<https://www.who.int/wer/2016/wer9112.pdf?ua=1> (Accessed February 5, 2020).
Why we liked this site: This site gave us more of an insight on the dangers of polio. It also gave us the perspective from the World Health Organization. This is a very credible source so it showed us how serious this was in the eyes of the private and public.

Kolata, Gina Bari. *Flu: the Story of the Great Influenza Pandemic of 1918 and the Search for the Virus That Caused It*. Simon & Schuster, 2005. This book gave us an insight on the time and conditions and the severity of viruses back then.