

# Fifteen Cents to See the Infants on Display

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Senior Division

Group Exhibit

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Neonatology is a rapidly expanding field of medicine, that is only beginning to become the norm of today. We wanted to fuse our passion for this field of medicine with its historical origins. While researching the developers of neonatology, we came across Dr. Couney and his unique story. It makes sense to us now that when an infant is born early, warmth and thermoregulation is the answer to continue the growing process. However, at the turn of the century, this idea was peculiar. To understand this dynamic, we chose to research Couney's sideshows and build a personal connection to his work. Our goal is to share Couney's story.

Couney's unorthodox method of popularizing infant care fascinated us, and further research locked us in. Our research process was extremely special. We started off by gathering as much general knowledge as we could. We saw the stories of several premie survivors

repeatedly throughout our research. It struck us that some of these “babies” were still around, so, we sent out a few emails. We’ve been corresponding with six of Couney’s former patients- Lucille Horn, Beth Allen, Carol Heinisch, Kathy Meyer, Jean and Jane Umbarger. Each of these women was once condemned to death, but was saved by Couney. They have each individually shared their stories, opinions and pictures with us. We obtained a strong personal connection with Dr. Couney and his work, making the research we’ve conducted so special.

We chose to craft an exhibit in order to parallel Couney’s method of showcasing the premature infants by portraying the contrasting “freak” and “infant” themes of our topic. The boardwalks where Couney advertised his premie sideshows were captivating and bold. Our exhibit reflects this aspect of the sideshow, with lights representative of the time period catching the viewer’s eye such as those used by Couney. We used pastel yellow paper and incorporated artifacts like the vintage baby scale to represent the babies in our exhibit.

A hundred years ago, people generally believed premature babies were of lesser value than full term babies. It became clear to us that Couney uniquely exchanged this old mentality with new, innovative ideas that proved premies could be saved to live healthy lives. Couney lived his life bravely by exploring new ideas in a field that wasn’t accepted in the medical world. To share and bring attention to his work, he exhibited premature babies as a sideshow, urging encounters between regular people. In the early 1900’s, many mothers left their premature infants to die due to high medical bills. Couney wanted to put an end to this dynamic. Therefore, he charged the families of the premature infants nothing and only charged the viewers to watch the “show”. Ultimately through the sideshows, his ideas were exchanged, and other countries and doctors adapted his radical idea. Today, we don’t even think twice about the NICU, but at the

turn of the century, the human incubator was just another anomaly of the boardwalk.

## Annotated Bibliography

### Primary Sources

Advertisement for A-Y-P Baby Incubator Exhibit, Seattle, 1909. 1909. *History Link*. Web. 26 Feb. 2016.

<[http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file\\_id=8921](http://www.historylink.org/index.cfm?DisplayPage=output.cfm&file_id=8921)>. This advertisement for Couney's incubator shows at the Alaska-Yukon-Pacific Exhibition in 1909, expresses the perceivably ugly side of Couney's shows. It reads, "see what Science has done for the world's little weaklings in the baby incubators." This statement supports the encounter aspect of the theme by universalizing the general perception of premature babies.

Allen, Beth. Interview by Elinoar Astrinsky. "Beth Allen". Coney Island History Project. Coney Island History Project, 28 June 2007. Web. 11 Feb.

2016.<<http://www.coneyislandhistory.org/oral-history-archive/beth-allen>>. Listening to Beth Allen tell her story allows us to understand Couney's work from the eyes of someone who was directly affected. Allen describes the severity of her condition and the unconventional but effective means that were taken to save her life. Allen also describes Couney's personality and how he believed in caring for the babies.

Allen, Beth. Personal interview. 15 Feb. 2016. Over email, Beth Allen personally shared her story with us. We built an emotional connection with Couney and his work, and experienced firsthand the product of his dedication. We are able to understand what Couney did in the eyes of those who it directly affected. We are sharing Beth's story on our board to offer a new emotional connection to Dr. Couney and his patients.

Arnold, C. D. Baby incubator building at Pan-American Exposition. 1901. *University at Buffalo*. Web. 30 Apr. 2016. <<http://library.buffalo.edu/pan-am/exposition/health/medical/incubators.html>>. This photograph taken by C. D. Arnold shows the building where Couney's incubators and babies were showcased. This photo shows a line of people outside the building waiting to get in. This picture sums up how Couney reached the public- by attracting them to his flashy, obscure sideshows.

Baby Incubator exhibit interior, Alaska-Yukon-Pacific-Exposition, Seattle, Washington, 1909. 1909. Alaska Yukon Pacific Exposition Postcard Collection. PH Coll 777. U of Washington. *University of Washington Digital Collections*. Web. 26 Feb. 2016. <<http://digitalcollections.lib.washington.edu/cdm/singleitem/collection/ayp/id/977/rec/157>>. Couney's work was so unique because he was able to spread it all around the world, especially across the US. This image shows Couney's staff at the Alaska-Yukon Pacific Exposition posing with the incubators, which hold seven babies. Couney left a trademark each place he visited, saving lives and spreading new ideas as well as a new mentality across the world.

Baby Incubator exhibit on the Pay Streak, Alaska-Yukon-Pacific-Exposition, Seattle, Washington, 1909. 1909. Alaska-Yukon-Pacific-Exposition Collection. U of Washington. *University of Washington Digital Collections*. Web. 26 Feb. 2016. <<http://digitalcollections.lib.washington.edu/cdm/singleitem/collection/ayp/id/884/rec/158>>. This photograph shows the exterior of Couney's Alaska-Yukon-Pacific exhibits. It was advertised as "Incubators with Living Infants" and was even accompanied by an "Incubator Cafe." This really emanates the sideshow aspect of the incubators, and how they were seen as a form of entertainment.

Baby Incubators at the Pan-American Exposition. 3 Aug. 1901. *University of Buffalo*. Web. 30 Apr. 2016. <<http://library.buffalo.edu/pan-am/exposition/health/medical/incubators.html>>. This photograph provides an inside look at one of Couney's early sideshows. A nurse and incubator are shown inside one of the rooms. Comparing this photo to one of Couney's later shows, allows one to see the advancements Couney made to the technology of neonatology and the people it reached.

Ballantyne, J. W. "The Problem with the Premature Infant." *The British Medical Journal* 1.2159 (1902): n. pag. Print. Society is familiar with the concept of the premature infant, however the true realization of the size of the infant is hard to truly be cognizant of. The Problem with the Preemie explains the severity of the problem of premature birth. A section dedicated to the anatomy of the preemie, is a very powerful excerpt that demonstrates the environmental shock the infants go through. It also explains how the preemie is only a fetus outside of the womb. Their organs have not developed, they are solely skin and bones. The length Dr. Couney went to, in order to make sure the infants weighing nearly one pound, is remarkable.

Beth Allen with Old Pictures. Aug. 2015. *People*. Web. 26 Feb. 2016.

<<http://www.people.com/article/incubator-babies-sideshow-dr-martin-couney>>. Seeing Beth Allen, a former Coney Island baby, in the present exemplifies the good cause that Couney worked towards. He believed that premature babies had a good a chance at life as full term babies. Because of this strong belief, the field of neonatology will prosper for generations to come.

Binder, Joseph. *New York World's fair, the world of tomorrow, 1939*. 1939. Prints & Photographs Online Catalog. Lib of Congress, Washington D.C. POS - US .B552, no. 10.

*Library of Congress*. Web. 26 Feb. 2016. <<http://hdl.loc.gov/loc.pnp/cph.3b52871>>.

Because of the moral service Couney provided, it is easy to overlook the sideshow aspect of his incubators. Seeing the New York World's Fair poster solidifies the carnival aspect of Couney's incubators and makes the reality of Couney's work easier to see.

The Boardwalk. 1906. *Neonatology*. Web. 5 Feb. 2016.

<<http://www.neonatology.org/pinups/coneyislandnurses.html>>. The boardwalk where the preemies resided was above all a carnival that was busy at all times because of the bizarre advertisements that attracted the public. Couney's premature infants were seen as "freaks of nature". Couney exchanged the old mentality that premature infants weren't meant to survive with a new one, that proved that they could survive and prosper.

Cary, Evelyn Rumsey. *Pan American Exposition, Buffalo, May 1 - November 1, 1901. Niagara*.

1900. Prints & Photographs Online Catalog. Lib of Congress, Washington D.C. POS - US .C3781, no. 1. *Library of Congress*. Web. 26 Feb. 2016.

<<http://hdl.loc.gov/loc.pnp/cph.3g04670>>. The Pan-American Exposition in Buffalo was one of Couney's first exhibitions in the US. The poster from this exposition serves as a strong visual to represent the sideshow aspect of Couney's work.

Chapple, Charles C. "A New Infant Incubator." *American Journal of Nursing* 39.9 (1939): 970-

73. PDF file. The optimal conditions for the premature infant incubator was created through guess and check. This provided the opportunity to learn how specifically, infants responded to certain treatments and incubator conditions. Due to the lack of research upon preemies, it was difficult to gauge the needs of the premature infants solely due to the size of their organs and immune system. The final solution as how to combat infant mortality is with thermoregulation. This journal focuses on the importance of humidity ,

oxygen levels, and how temperature play pivotal roles in helping the growth of the premature infants.

Cohen, Beatrice, and Elizabeth Dobell. "The Bea Blog -- Part VI -- 1917 (July-December)." *The Bea Blog*. Blogger, 15 Jan. 2014. Web. 15 Feb. 2016.

<<http://beadiaries.blogspot.com/2014/01/the-bea-blog-part-vi-1917-july-december.html>>.

Dobell found a collection of her grandmother's diaries and decided to document excerpts of them in a blog form. Her grandmother, Bea Cohen, visited Coney Island and witnessed Couney's sideshow, describing it as "really pitiful." This firsthand account gives us a true insight as to what outsiders saw the babies as- a true sideshow.

Couney, Martin Arthur. "Diploma Issued by Baby Incubators." Letter to the author. 14 June 1940. TS. Kathy Meyer was one of the New York World's Fair premature infants encased in Dr. Martin Couney's revolutionary incubator. We personally interviewed her and acquired more pictures from her. This is Meyer's baby incubator certificate; this artifact is so influential because it solidifies the foreign idea that Couney put babies on display as a carnival sideshow.

Couney's Dreamland nurses holding preemies. 1906. *Dreamland*. Web. 26 Feb. 2016.

<<http://www.westland.net/coneyisland/mapsdocs/dr06-map3.htm>>. This photo shows three of Couney's nurses from Dreamland, Coney Island holding his preemies. This photo brings all of Couney's work together. His nurses, like himself, cared for the babies and were highly qualified to do so. This photo also heightens the severity of the babies' conditions and brings to reality how small premature babies really are.

Dr. Goldstein holding Kathy Meyer. 1939. JPEG file. Kathy Meyer sent us this photograph of her being held by her pediatrician Dr. Goldstein. Accompanied with the photo, Meyer

relayed her story and gratitude of Dr. Goldstein. He informed her parents of Couney's sideshows and his free care. Couney's work was well known beyond just the boardwalks, hospitals were beginning to recognize the effectiveness of his work, recommending it to their patients.

*Dr. Martin Couney. 1939. Neonatology on the Web. Web. 28 Jan. 2016.*

<http://www.neonatology.org/pinups/couney.html>. This photograph illustrates Dr. Martin Couney's pride in his work, investment in the long term health of the infants, as well as the long term effects his work would have on neonatology. Couney is pictured holding one of the children who survived their premature days.

Employees stand before the Infant Incubators building at the 1901 Pan-American Exposition in Buffalo, New York. 1901. Photos, Prints, Drawings. Lib of Congress, Washington D.C. *Library of Congress. Web. 26 Feb. 2016. <<https://www.loc.gov/item/2005692427/>>*. This photo shows Couney's incubator staff standing in front of the Pan-American Exposition building in 1901. This shows the involvement and support Couney had with his idea. He was beginning to find and develop a group of people who shared his unique ambition and optimism for the future of humankind.

French, A.E. A crowd gathers around an announcer at a sideshow on the boardwalk at Coney

Island in the 1930. N.d. Getty Images Archives. *PBS. Web. 26 Feb. 2016.*

<http://www.pbs.org/newshour/updates/coney-island-sideshow-advanced-medicine-premature-babies/>. As Couney gained popularity through his sideshows, a new mentality about the worth of infants changed. Before Couney, most people believed premies were born early because they weren't meant to survive in God's eyes. Couney

tried to shift the public's negative view of premature infants to a more optimistic perspective.

Graduation Certificate of Kathy Meyer. 1939. JPEG file. Dr. Couney presented each of his graduated babies with a diploma to recognize their growth and success at his sideshow hospitals. Kathy Meyer, a New York World's Fair baby, emailed us a copy of her certificate. She expressed how she treasured the diploma as a token of accomplishment.

Harrison, Jean. Personal interview. 24 Apr. 2016. Jean Harrison is a Couney baby from the 1934 World's Fair. She expressed her story to us. Interestingly, she and her twin both survived early birth because of Dr. Couney. Harrison also shared her mother's averse opinion towards the sideshow element of Dr. Couney's work, which allows us to share both sides of Couney's controversy in our project.

Horn, Lucille. Personal interview. 24 Apr. 2016. In a personal interview with Jane Harrison, a Couney baby from the 1934 Chicago World's Fair, she expressed her gratitude towards Dr. Couney. She agreed with our argument that Couney "was trying so hard to get the right people to understand what he was trying to do." Besides saving babies, Couney's ultimate goal was to attract people and doctors to the idea of neonatology and change a culture.

Hart, Ernest. "Clinical Notes in The Paris Hospitals. La Charité Hospital: Service of Dr. Budin." *British Medical Journal* 1.1626 (1892): 451-52. Print. The British Medical Journal reported Pierre Budin, inventor of the incubator's, obituary. The writings in regards to Budin acknowledge his modern, innovative medical achievements such as the incubator. This was the start to the public's introduction to premature infant care, and an initiating

moment for Dr. Couney's sideshows, and the future of neonatology, as well as the shift to a new value of life.

Heinisch, Carol. Personal interview. 24 Feb. 2016. Carol, an Atlantic City baby, shared her story with us. Carol shared with us not only her obvious connection to Couney, but her family and community's connections as well. She recalled a local radio personality donating his recess money to Couney when he was a teenager. This extra information gives us an insight into the "baby's" eyes, but also the eyes of the public, which was part of Dr. Couney's initiative.

Hess, Julia H. Letter to Martin A. Couney. 1941. PDF file. The appreciation and gratitude each parent felt after getting their child put on display by Dr. Couney is extraordinary. This letter by Julia Hess, describes her utmost gratitude towards Dr. Couney. This allows us to glimpse into the emotional connections that Couney had, and his pure selflessness.

Hildegarde Couney holding Carol. 1942. JPEG file. Carol Heinisch, the baby in the photo, personally sent this image to us. She is shown being held by Hildegarde Couney. Carol shared her story with us and helped us grow a personal connection to Couney's work. This photo, when shown side by side with a present day photo of Carol, as shown in our exhibit, expresses the weight of Couney's work and how important it is.

Horn, Lucille. Interview by Mayra Sierra. 2015. This StoryCorps interview set our project in motion, it was a key component in crafting our research. It was the first source that made us cognizant that some of Couney's babies were still alive today.

- - -. Personal interview. 17 Feb. 2016. Creating emotional connections, directly with those who were affiliated with Coney Island crafts a deeper understanding of the topic. Lucille was so grateful for Dr. Couney and respected every part of him. This aspect of the interview

allowed us to dive deeper into the heart of Coney Island and it's founder Dr. Martin A. Couney.

*Incubator Babies*. 1904. *History Detectives*. Web. 29 Dec. 2015.

<http://historydetectives.nyhistory.org/2014/08/blast-past-tiny-incubator-babies-coney-island-attraction/>. This photograph illustrates the illusion in which Dr. Martin Couney wanted to create. The smaller in which the infant appeared, the more money he would receive to fund the medical expenses of the premature infants. This allowed is sideshows to thrive, and his idea of the incubator to emulate into society.

Infant Incubators. Advertisement. *Atlantic City Amusements Guide* 31 May 1920: n. pag. Print.

This advertisement is a bizarre visual that allows us to portray the time period in our exhibit, while also allowing us to understand the reality of the sideshows. It is a clear representation of the invitation for average people to encounter a new field of research, and experience more about humanity and science.

*Kathy and Dr. Goldstein*. 1939. Photograph. While corresponding with Kathryn Meyer, a former Couney baby from the New York World's Fair of 1939, she emailed us this photograph of her pediatrician holding her. Kathy's story, along with this picture, really allows us to make a personal connection with Couney and his work and see the amazing things he did.

Kathy Meyer portrait. N.d. JPEG file. This is a current photo of Kathy Meyer, one of Couney's Coney Island babies. She personally shared a photo of her from when she was a baby as well as this current photo. These pictures combined show the amazing things Couney accomplished. When rejected from a hospital, Couney saved Kathy's life, and her eyesight.

Kathy's engraved cup. N.d. Digital file. While emailing Kathy, she told us that Couney hosted a reunion a year after the NY Fair for all of the babies and their families. He presented each with an engraved cup and diploma. Kathy was unable to make the reunion, however, she received her gifts and said, "I treasure it."

Liebling, A. J. "Patron of the Premies." *The New Yorker* 3 June 1939: 20. *The New Yorker*. Web. 26 Dec. 2015. <<http://Transferring the Incubator: Fairs and Freak-Shows as Agents of Change>>. This magazine truly contrives the social idea of the premies. However, it also highlights the controversy in which Dr. Martin Couney created with his sideshow and therefore reformed the field of neonatology.

"Lucille Horn." *StoryCorps*. StoryCorps, n.d. Web. 11 Feb. 2016.

<<https://storycorps.org/listen/lucille-horn-150710/#>>. Lucille Horn is one of the few babies from Couney's exhibitions still living. The photograph shows Horn smiling with her daughter Barbara. This photo emanates the impact that Couney's work had by displaying not only the survivor, but her family as well.

Lucille Horn her first day home from the Coney Island Sideshow. JPEG file. Lucille Horn is one of the most well known Coney Island babies. This picture is of Horn her first day home from the sideshow. She is healthy and fully grown in this picture. This exemplifies the extravagant care in which Couney provided for his premies.

Lucille Horn, one of the Coney Island premies. N.d. JPEG file. We were privileged enough to speak with one of the Coney Island "babies", Lucille Horn. This is a personal picture, sent to us by her son Lance Horn. It shows present day Lucille, and pictures how healthy she is and how Dr. Couney did a wonderful job treating the premies.

Lucille's first day home from the sideshow. N.d. JPEG file. Lance Horn, who is Lucille Horn's son contacted us after our interview with his mother. He sent us personal pictures of Lucille, the day that she came home from the sideshow. This picture has Lucille's mother, and her grandmother. This truly solidified the emotional perspective in which we created through our interview, and the individual impacts Couney made on each family.

Luna Park. N.d. PBS. *Public Broadcasting Service*. Web. 19 Feb. 2016.

<<http://www.pbs.org/newshour/updates/coney-island-sideshow-advanced-medicine-premature-babies/>>. Beth Allen is one of the surviving preemies in which Couney saved with his groundbreaking technology and unique caring environment. We contacted her and interviewed her to learn more about her amazing story. This photograph is courtesy of Beth Allen, which gives us a glimpse into how Couney utilized propaganda to attract customers; which in turn saved the preemies and made the incubator accepted in the United States.

Luna Park's original main entrance. 1903. *Coney Island History*. Web. 26 Feb. 2016.

<<http://www.westland.net/coneyisland/articles/lunapark.htm>>. This poster of Luna Park craftily recreates the appearance of Luna Park's main entrance at night. This is the type of environment Couney established his unique "hospitals" right in "the heart of Coney Island." This advertisement is essential to our data because it showed the societal aspects that Couney hoped to capture.

*Martin A. Couney*. 1909. *Neonatology on the Web*. Web. 28 Jan. 2016.

<<http://www.neonatology.org/classics/silverman/silverman1.html>>. Dr. Couney is shown holding baby Qbata at the Chicago World's Fair in 1909. At the time, Qbata was the smallest baby ever born, weighing only 2 pounds 9 ounces. This photograph

demonstrates how the premature infants were always on display in a vulnerable position, as well as Couney's ability to nurse even the weakest to health.

Meyer, Kathy. Personal interview. 16 Feb. 2016. Kathy Meyer is one of Couney's former patients from the New York World's Fair of 1939. Meyer shared her story as well as unique qualities of Dr. Couney. At this time, hospitals were beginning to introduce incubators as treatment, however, Couney's techniques were far more advanced. The 1939 hospital incubators caused blindness in many of their patients. Meyer, being one of Couney's babies, had perfect eyesight. Even when hospitals accepted Couney's idea, his passion made his work better.

Nowell, Frank H. Baby incubator exhibit, Pay Streak, Alaska Yukon Pacific Exposition, Seattle, Washington, 1909. 1909. Alaska-Yukon-Pacific Exposition Collection. U of Washington. *University of Washington Digital Collections*. Web. 26 Feb. 2016. <<http://digitalcollections.lib.washington.edu/cdm/singleitem/collection/ayp/id/80/rec/161>>. Nowell's photograph shows a growing preemie baby in one of Couney's incubators at the Alaska-Yukon-Pacific Exposition. This photograph was taken from the perspective of Couney's "audience." This is how the public viewed the babies, through the glass of the incubator, looking on with interest.

Portrait of Carol Heinisch. 10 Oct. 2010. The Press of Atlantic City, Atlantic City. *Press of Atlantic City*. Web. 26 Feb. 2016. <[http://www.pressofatlanticcity.com/blogs/scott\\_cronick/for-boardwalk-empire--era-atlantic-city-babies-in-incubators/article\\_89b9eb56-d992-11df-bdf7-001cc4c03286.html?mode=image&photo=1](http://www.pressofatlanticcity.com/blogs/scott_cronick/for-boardwalk-empire--era-atlantic-city-babies-in-incubators/article_89b9eb56-d992-11df-bdf7-001cc4c03286.html?mode=image&photo=1)>. Carol's present-day photo helps us build a

relationship with Couney and his work. We have placed Carol's photo next to one of her when she was born to bring home the importance of Couney's work.

Premature infants who were kept in incubators at Wonderland Park, Minneapolis. 1905.

Minnesota Historical Society. Minnesota Historical Society, St. Paul. *Mnopedia*. Web. 5 Feb. 2016. <<http://www.mnopedia.org/multimedia/premature-infants-who-were-kept-incubators-wonderland-park-minneapolis>>. This picture was taken at one of Couney's sideshows at the Minneapolis Wonderland Amusement Park Infantorium. Two nurses are shown holding two different babies, one who has spent time in Couney's care, and the other who is fairly new. This photo displays the impact Couney's work had on so many lives, and inspires a personal connection to his exploration.

Raffel, Dawn. Personal interview. 15 Feb. 2016. Dawn Raffel is an author who is currently writing a cultural biography on Dr. Couney. She emailed with us and shared her personal thoughts on Couney's work, which allowed us to understand the significance of Couney's exploration into neonatology. "I believe Dr. Couney was highly influential in the development of American neonatology and that his contributions have been under-recognized."

Scheffer, Glen. *World's Fair, Chicago. A Century of Progress, 1833-1933*. 1933. Prints & Photographs Online Catalog. Lib of Congress, Washington D.C. POS - US .S464, no. 1. *Library of Congress*. Web. 26 Feb. 2016. <<http://hdl.loc.gov/loc.pnp/cph.3b48541>>. Scheffer's Chicago World's Fair poster reminds us what Couney's work was like to the public. Although moral, Couney's incubators and preemies were a sideshow, viewed by the public for enjoyment. Couney manipulated these public encounters to his advantage to educate the world about a real solution to premature birth.

Seattle Alaska-Yukon-Pacific Exposition Advertisement 1909. 1909. The Seattle Times, Seattle.  
*The Seattle Times*. Web. 26 Feb. 2016.

<<http://seattletimes.nwsourc.com/ABPub/2009/05/11/2009208429.jpg>>. This is the poster for the AYP Exposition of 1909 where Couney hosted one of his “hospitals.” It expresses the sideshow aspect of Couney’s shows, and how worldwide Couney’s work was.

Trans-Mississippi International Exposition, Omaha, June to November, 1898. 1898. *Trans-Mississippi International Exposition*. Web. 26 Feb. 2016. <<http://trans-mississippi.unl.edu/texts/view/transmiss.book.tmie.1898.html>>. The Trans-Mississippi Exposition of 1898 was the first United States location of Couney’s incubators. This exposition set the stage for Couney’s work, and its success encouraged Couney to further his displays. Couney exchanged his ideas with people all over the world, and this poster displays his means for spreading his ideas to the US.

Walery. Pierre Budin. N.d. Pierre Budin. Bibliothèques Interuniversitaires Sante, Paris.  
CIPH0062. *BIU Sante*. Web. 27 Apr. 2016.

<<http://www.biusante.parisdescartes.fr/histoire/images/?mod=s&tout=pierre+budin>>.  
Pierre Budin was one of the first doctors to explore neonatology. Couney studied under him and propelled his invention further. Including Budin in our exhibit allows the viewer to understand that Couney wasn’t alone in his quest to advance neonatology; however, not many were working in the field.

Weighing an infant. 1901. *University at Buffalo Libraries*. Web. 30 Apr. 2016.

<<http://library.buffalo.edu/pan-am/exposition/health/medical/incubators.html>>.

Photographs of Dr. Martin Couney’s sideshow help clearly discern the bizarre, carnival

aspect of the sideshows and the medical perspective of the shows. Couney cared for the infants while quickly gaining the public's attention.

Woolsey Wells Conlin holds Lucille her first day coming home from the sideshow. JPEG file.

Woolsey Wells Conlin was Lucille Horn's actual father. However, at Coney Island Dr. Martin Couney acted as a second father to Lucille practically allowing her to live. Couney treated each baby as if they were his own, using loving and caring techniques such as hugging and kissing them.

### **Secondary Sources**

Altman, Frank. "Once a Sideshow, Former Premies Praise Doctor Years later." *The Big Story*.

N.p., 31 July 2015. Web. 26 Dec. 2015.

<<http://bigstory.ap.org/article/7c880eb1b44247f19b4278fdf98bb36f/once-sideshow-now-old-former-preemies-praise-bold-doctor>>. Throughout history, controversy morphs due to social standards. Dr. Martin Coney's radical ideas in the 1930's were not seen as moral. However, in today's standards he is idolized as a hero. This website specifically addresses this social standard to his radical ideas.

Antonucci, Roberto. "The infant incubator in the neonatal intensive care unit." *Journal of*

*Perinatal Medicine* (2009): 587-98. PDF file. In this contribution from the *Journal of Perinatal Medicine*, Antonucci summarizes the highlights and flaws of different incubators through history. Antonucci explains that Budin's incubator, being one of the first, was advanced and modified major issues like over-heating. These were the incubators Dr. Couney employed. Further, Antonucci expressed the chain in which neonatal knowledge was passed down from doctor to doctor in a small community.

Arsenault, Anisa. "How Coney Island Sideshows Kept Preemies Alive." *The Bump*. N.p., n.d.

Web. 14 Jan. 2016. <<http://blog.thebump.com/2015/07/10/coney-island-sideshow-babies/>>. Dr. Martin Couney wanted to craft the sideshow was the persona of an amusement park. This factor played a pivotal role in capitalizing on the preemie oddities in order to keep them alive.

Atlanta City Experience. "Infant Incubator Exhibit." *Atlanta City Experience*. N.p., n.d. Web. 26 Dec. 2015.

<[http://www.atlanticcityexperience.org/index.php?option=com\\_content&view=article&id=9&Itemid=6](http://www.atlanticcityexperience.org/index.php?option=com_content&view=article&id=9&Itemid=6)>. Dr. Martin Couney's inspiration to proceed in the research of neonatology has a huge effect in the creation of the incubator. The personal experience where "Dr. Couney's own daughter was born premature" gave him a goal in which he fulfilled which is addressed within this website.

"Baby Incubator Exhibit at the Pan-American Exposition in Buffalo." *University at Buffalo*

*Libraries*. N.p., n.d. Web. 29 Apr. 2016. <<http://library.buffalo.edu/pan-am/exposition/health/medical/incubators.html>>. Couney played a pivotal role in defining when life began. This website provides insight to the Pan-American Exposition in Buffalo, and connects it to the public's viewpoint on premature infants. This demonstrates how accessible Couney's care was to infants, and how he universalized the positive mindset about premature infants.

Baker, Jeffery P. "The Incubator and the Medical Discovery of the Premature Infant." *Journal of*

*Perinatology* 2000 5th ser. (2000): n. pag. *Neonatology.org*. Web. 6 Jan. 2016.

<<http://neonatology.org/pdf/7200377a.pdf>>. The concept of the incubator incorporates the idea of heat. The mother is ninety-eight degrees (F), the incubator tries to replicate the

growing conditions inside of the womb with heat constantly surrounding the infant. This journal addresses the origins of the idea of the incubator and the political as well as the historical aspects at the time when the idea was introduced. This aided with the research regarding the pre-existing idea of the incubator

Brick, Michael. "And Next to the Bearded Lady, Premature Babies." *The New York Times*. New York Times Company, 12 June 2005. Web. 9 Jan. 2016.

<[http://www.nytimes.com/2005/06/12/nyregion/and-next-to-the-bearded-lady-premature-babies.html?\\_r=0](http://www.nytimes.com/2005/06/12/nyregion/and-next-to-the-bearded-lady-premature-babies.html?_r=0)>. Dr. Couney's idea of creating a sideshow to exploit the infants and to advertise them as freaks of nature was the most efficient route for Couney. In order to get care to the infants, and exchange the old mentality that premies were meant to die; Couney had to capture the public's attention with through unconventional means.

Cedars-Sinai Medical Center. "Martin Couney's Incubator Baby Exhibit at the New York World's Fair." *Neonatology on the Web*. Ed. Cedars-Sinai Medical Center. Cedars-Sinai Medical Center, 21 Feb. 2009. Web. 26 Dec. 2015.

<<http://www.neonatology.org/pinups/nywf.html>>. This article analyzes the setup of Coney island, provides beneficial statistics on the uprising of the field of Neonatology and also explores Couney's success. It follows the triumphs and defeats that Couney overcame which helped us research further on the low-points of Coney Island.

Centers for Disease Control and Prevention. *Achievements in Public Health, 1900-1999: Healthier Mothers and Babies*. Atlanta: n.p., 1999. Morbidity and Mortality Weekly Report. CDC. Web. 19 Apr. 2016.

<<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4838a2.htm>>. It is difficult to be cognizant of how many infants died in the 20th century. Hospitals denied care to infants

born early solely due to their size. The CDC provides infant mortality rates, which go down starting in the early 1900's; when Couney started to create his infant sideshow attractions. This truly creates a large impact in our project because it allows us to graphically see the difference Couney made.

DeBenedette, Valerie. "When Premature Babies Were on Display at Coney Island." *Pregistry Blog*. Stefanie Amini, n.d. Web. 30 Apr. 2016. <<http://blog.pregistry.com/when-premature-babies-were-on-display-at-coney-island/>>. After diving into the research of Dr. Couney and his debatable sideshows, it is difficult to see how the public today views Couney's sideshows. Some still view his carnival-like attraction as immoral. This controversy helps establish a standing point for an argument defending Couney. This blog helps create a new viewpoint for our exhibit.

Duisen, Michael Van. "The Doctor Who Rescued 6,500 Prematurely Born Babies." *Knowledge Nuts*. Ed. Jamie Frater. N.p., n.d. Web. 11 Jan. 2016. <<http://knowledgenuts.com/2013/09/14/the-man-who-rescued-6500-prematurely-born-babies/>>. Couney's life was not very clean cut, dates in which he explored neonatology are difficult to find. However, this website addresses these dates in a very precise manner, which advanced our knowledge of Couney.

Duncan, Ray. "Coney Island Sideshows." *Neonatology on the Web*. Ed. Cedars-Sinai Medical Center. Cedars-Sinai Medical Center, 29 Jan. 1999. Web. 26 Dec. 2015. <<http://www.neonatology.org/pinups/coneyislandnurses.html>>. "Neonatology on the Web" conveys a the story of Coney Island through images. This helped create an advanced knowledge of details and technicalities of Coney Island.

Dunn, P. M. "Professor Pierre Budin (1846-1907) of Paris, and Modern Perinatal Care."

*Archives of Disease in Childhood* 73.3 (1995): F193-F195. *National Library of Medicine Digital Database*. Web. 22 Apr. 2016.

<<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2528458/>>. Pierre Budin did not only inspire Couney to pursue neonatology with an academic mind, Budin set a standard to unite "intelligence with humanity and vision." Budin invented the modern incubator and paved the way for neonatology to progress highlighting the essential feature of humanity, which was one of Couney's fundamental morals.

Dunn, Peter M. "The birth of perinatal medicine in the United Kingdom." *Seminars in Fetal & Neonatal Medicine* (2007): n. pag. PDF file. In this article written by Dunn, the professor of perinatal medicine at University of Bristol, discusses the development of neonatology and perinatal medicine in the UK. The article discusses a setback in the development of neonatology during the early 20th century due to a focus on gynecological surgery.

During this time, Dr. Couney fought against the lull in neonatology in the medical world.

Early incubator patent drawing. N.d. Houston Public Media, Houston. *The Engines of Our Ingenuity*. Web. 26 Feb. 2016. <<http://www.uh.edu/engines/epi2279.htm>>. This image describes in a simple way Pierre Budin's incubator. This visual ties together the medical side of our project and allows views to understand the obscure methods Couney practiced to save lives.

Field, Chris. "Boardwalk Babes: The Strange Story of the Incubator." *The Blaze*. N.p., 19 Nov. 2014. Web. 26 Dec. 2015. <<http://www.theblaze.com/stories/2014/11/19/boardwalk-babes-the-strange-story-of-the-incubator/>>. This website provides beneficial insight to the juxtaposition among the babies and the other "freaks" within the sideshow. Field

explains that these premature babies were placed next to the sword swallower to make the babies seem like an rarity.

Harrison, Helen. "History of Prematurity in the Early 1900's." *Prematurity*. Ed. Helen Harrison. N.p., n.d. Web. 22 Apr. 2016. <<http://www.prematurity.org/research/helen-history.html>>.

The timeline of premature infant care is very unique to other fields of medicine due to the issue that no one agreed as to what techniques were correct. This website lays out the groundwork for Couney and his distinctive method of treating the preemies. Helen Harrison has an article in which she takes a different, more upbeat perspective on Couney's work.

"Infant Mortality Rates, by Year- United States 1915-1997." *Center for Disease Control*. N.p., n.d. Web. 19 Apr. 2016.

<<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4838a2.htm>>. Dr. Martin Couney saved 6,500 lives of premature infants. It is difficult for one to see the long term impact that Dr. Couney made on society. This graph, exemplifies how Couney's incubator will save the lives of thousands of premature infants for years to come.

Luna Park Tickets. *Theme Parks*. N.p., n.d. Web. 26 Feb. 2016.

<<http://www.goodmagic.com/websales/midway/amuse.htm>>. These Luna Park tickets truly made emotional connections, due to the nature of the sideshow. These preemies were treated as a piece of entertainment and not as human beings.

Martin Couney's business card. *Neonatology on the Web*. N.p., n.d. Web. 26 Feb. 2016.

<<http://www.neonatology.org/pinups/couney.html>>. Dr. Martin Couney not only advertised as an entertainment attraction, he also promoted himself as a doctor. His business card attracted those in need of immediate help.

Mazurak, Magdalena, and Malgorzata Czyzewska. "Incubator Doctor and the Dionne Quintuplets: On the Phenomenon of Exhibiting Premature Infants." *History of Medicine* (2006): 313-16. Web. 5 Jan. 2016.

<[http://www.dmp.am.wroc.pl/artykuly/DMP\\_2006432313.pdf](http://www.dmp.am.wroc.pl/artykuly/DMP_2006432313.pdf)>. This journal describes an incident of premature infants born in another country which was inspired by the ideas of Couney to expand infant care to those born before term. A clear exchange of ideas is shown here as different cultures adapt new ideas and methods and put them into practice.

Minutaglio, Rose. "Former 'Sideshow' Incubator Babies Praise 'Gutsy' Doctor Who Saved Them." *People*. Ed. Will Lee. Elizabeth P. Valk, 3 Aug. 2015. Web. 26 Dec. 2015. <<http://www.people.com/article/incubator-babies-sideshow-dr-martin-couney>>. This article exemplifies how Dr. Martin Couney was viewed at the time as a "gutsy" because of his exploration with the incubator. Many people at the time thought of Couney as not reputable and not a professional in the field of neonatology. However this website provides insight to statistics of his success rate at 81%.

Morris, Jasmyn Belcher. "Babies On Display: When A Hospital Couldn't Save Them, A Sideshow Did." *Storycorps*. Ed. Roman Sparkman. Storycorps, 10 July 2015. Web. 26 Dec. 2015. <<http://www.npr.org/2015/07/10/421239869/babies-on-display-when-a-hospital-couldnt-save-them-a-sideshow-did>>. Lucille Horn was an influential spokesperson for Couney because of her first-hand experience. The Story Corps interview helps convey her story in a deeper manner.

Pointing finger. *Daily Dot*. N.p., 7 Jan. 2016. Web. 27 Apr. 2016.

<<http://www.dailydot.com/politics/oregon-residents-tell-militants-to-leave/>>. This is an illustration of a pointing finger that fits the type of art that was used during the time of

Couney's shows. To mimic the aspect of advertising of Couney's sideshows, we presented a finger pointing to authentic coins that would have been used to pay for admittance to Couney's sideshows.

Pollack, Michael. "The Incubated Babies of the Coney Island Boardwalk." *The New York Times*: n. pag. *The New York Times*. Web. 14 Jan. 2016.

[http://www.nytimes.com/2015/08/02/nyregion/the-incubated-babies-of-the-coney-island-boardwalk.html?\\_r=0](http://www.nytimes.com/2015/08/02/nyregion/the-incubated-babies-of-the-coney-island-boardwalk.html?_r=0). Not many accounts of how Dr. Martin Couney's side show ran have been recorded. However, this website provides insight to the people in which he employed and their job expectations. Wet nurses were hired to help the baby get the proper nutrients needed to sustain life. However, if these wet nurses ever ate in an unhealthy manner; Dr. Couney fired them immediately.

Potter, Derek. "Theme Park History: Dr. Martin Couney and the Coney Island 'Child Hatchery.'" *Insider*. N.p., 20 Oct. 2013. Web. 6 Jan. 2016.

<http://www.themeparkinsider.com/flume/201310/3734/>. A clear timeline of Dr. Martin Couney's life is difficult to find, however this website lays a clear itinerary of his sideshow. Many are not cognizant of the amount that Couney traveled. This website provide a clear insight to the life of the doctor who changed the field of Neonatology forever.

Proctor, Katie. "Transferring the Incubator: Fairs and Freak-Shows as Agents of Change." 13 Dec. 2004. PDF file. This essay crafts a clear explanation of how the Sideshow and incubators produced a social change. It also creates a timeline of the origins of the incubator and later connects it to Dr. Martin Couney.

Reedy, Elizabeth A. "Intensive Hospital Based Care of Infants in Twentieth Century America."

N.d. PDF file. Couney progressed the change for Neonatology and revolutionized the mentality that premature infants were "freaks of nature". This essay expresses how Couney changed society in the 20th century. The percent of infant mortality continues to decline due to Couney's endeavors.

Silberstein, Rachel. "Remember When Incubator Babies Were A Coney Island Attraction?"

*Bean*. Ed. Liena Zagare. N.p., n.d. Web. 14 Jan. 2016.

<<http://www.bensonhurstbean.com/2015/09/remember-when-incubator-babies-were-a-coney-island-attraction/#.Vpe712CJnzI>>. Dr. Martin Couney did not only save thousands of lives. However, he created new relationships and bonds that are eternal between the preemies. This website illustrates the real-life connection among the babies, providing information on reunions and the aftermath of Couney's legacy.

Silverman, William A. "Incubator Side-Shows." *Pediatrics* 64.2 (1979): n. pag. *Neonatology on the Web*. Web. 27 Dec. 2015.

<<http://www.neonatology.org/classics/silverman/silverman1.html>>. This clip within the journal provides a look into Dr. Martin Couney's entire life. The article contains Couney's obituary which highlights the widespread impacts his work had on the general population, as well as his impacts on the past and new impacts regarding the future.

Smith, Craig R. "The Incubator Babies of Coney Island." *Columbia Department of Medicine*.

N.p., n.d. Web. 11 Jan. 2016. <<http://columbiasurgery.org/news/2015/08/06/history-medicine-incubator-babies-coney-island>>. Columbia is one of the leading schools to dive into the field of Neonatology. This website explores the origins of those who explored the idea of the incubator before Dr. Martin Couney. This allows us to trace back to where

Couney got his original ideas which lets our research expand to those times before Couney.

*When a Hospital Couldn't Save Them, A Sideshow Did.* N.d. NPR. Web. 5 Feb. 2016.

<<http://www.npr.org/2015/07/10/421239869/babies-on-display-when-a-hospital-couldnt-save-them-a-sideshow-did>>. The NPR Storycorps interview about Lucille Horn and her experience with Coney Island was very valuable to our research. This picture consists of Lucille Horn and her daughter Barbara Horn. We contacted Storycorps, in order to get connected with Lucille which expanded our knowledge with an amazing first hand experience.

Yuko, Elizabeth. "The 'Child Hatchery' of Coney Island." *The Atlantic*. Ed. Scott Stossel. Hayler Romer, 29 Oct. 2015. Web. 14 Jan. 2016.

<<http://www.theatlantic.com/health/archive/2015/10/the-child-hatchery-of-coney-island/413080/>>. Neonatal-Intensive-Care-Units are a staple in every present day hospital, however in the early 20th century Dr. Martin Couney's sideshow was the state of the art NICU, due to his innovation. Not only did Couney inspire the incubator, he also inspired the facility in which the preemies are held in today. The Atlantis website provides insight into the other societal changes that we are familiar with today.