



Museums for America

Sample Application MA-10-18-0332-18
Project Category: Learning Experiences

Mütter Museum

Amount awarded by IMLS:	\$241,943
Amount of cost share:	\$716,719

Attached are the following components excerpted from the original application.

- Abstract
- Narrative
- Schedule of Completion

Please note that the instructions for preparing applications for the FY2019 Museums for America grant program differ from those that guided the preparation of FY2018 applications. Be sure to use the instructions in the FY2019 Notice of Funding Opportunity for the grant program and project category to which you are applying.

What happens when disease strikes a city of nearly two million people, sickening half a million and killing more than 12,000 in just six weeks and 20,000 in six months? How do people respond? What do they feel and fear? The next planned exhibition of the Mütter Museum of The College of Physicians of Philadelphia, *Spit Spreads Death: The Influenza Pandemic of 1918–19 in Philadelphia*, opening mid-October 2019, will explore these questions and more. Inspired by a public health campaign in 1918, the title warns against the transmission of the virus that killed more people globally than World War I and devastated Philadelphia over a few short months. For the past year, Mütter Museum staff, along with Trevor Smith, Curator of the Present Tense of the Peabody Essex Museum; artist group Blast Theory, represented by Matt Adams; and independent curator Jane E. Boyd, have been exploring the astonishing effects on Philadelphia, which sustained the highest mortality rate of any major American city. Despite this extraordinary impact, a survey of museum visitors shows that few people truly understand the severity of this public health crisis, though they are interested in learning more. According to historians, pandemics are largely overshadowed by the political, economic, and military events of the time. The flu pandemic presents additional challenges for traditional historical exhibitions because the devastating spread of the disease resulted in few related historical objects.

The proposed exhibition overcomes this challenge by using contemporary art and data analysis and visualization as the foundation for an exhibition that will address themes of *Patriotism and Propaganda*, *Civil Society in Crisis*, and *Remembrance and Memorialization*. The exhibition will feature an art film, digital interactives, objects and photographs—some loaned by Museum visitors—personal stories, and contextualizing historic and public health information. Based on data from more than 20,000 Philadelphia death certificates, the exhibition will provide detailed information about victims. In addition, two digital interactives will allow visitors to explore the progress of the disease through the city and the impact by neighborhood (even specific addresses or landmarks); by demographics like race, gender, and age; and by family name.

Blast Theory takes inspiration from a significant event in the progress of the flu pandemic in Philadelphia: the Liberty Loan Parade of September 28, 1918. Despite warnings from medical experts, city officials proceeded with the parade to support fundraising efforts for World War I, drawing more than 200,000 Philadelphians to packed streets, spreading the virus. Blast Theory will engage community health and health advocacy groups, artists, relatives of influenza victims, and the public to plan and participate in a commemorative parade on September 28, 2019. This parade will serve as the only known public memorial for the victims, people who suffered because patriotism was promoted over public health, and will honor people and organizations that, today, give voice to the health issues faced by individuals. Based on this audience engagement piece, Blast Theory will create an art film that is a work of reflection, as well as videoed interviews with medical and public health experts, to feature in the exhibition. Both works will provoke broader conversations and questions about the connections between the historical and contemporary and between this pandemic and other health crises.

In addition to holding national and international appeal through its universal themes, the compelling story of this moment in Philadelphia's history, the personal narratives of victims, and the potential for community involvement will provide an exciting opportunity to expand the local audience of the Mütter Museum. The three primary target audiences are high school students (and teachers), residents from four zip codes (that will overlap with the neighborhoods selected for the Neighborhood Explorer interactive), and young visitors ages 19 to 30.

Outcomes include *changes in knowledge* (like increased awareness about the significance of the flu pandemic in Philadelphia, the devastating scope of illness and death, and the role that the Liberty Loan parade played, and understanding how the pandemic impacted one's own neighborhood and the people living there in 1918); *changes in attitude* (like heightened engagement due to an empathetic response, and contemplation of the role of civic responsibility in pandemics and health crises); and *changes in behavior* (like deciding to get a flu shot). Success will be measured by Oberg Research, which conducted the front-end evaluation and will conduct a formative and comprehensive summative evaluation of the project.

Project Justification

What do you propose to do? In 1918, as World War I was ending, the global influenza pandemic hit Philadelphia harder than any other major American city, infecting nearly a quarter of the population and killing thousands within six weeks. Despite warnings from physicians that the disease was spreading quickly, patriotic fervor provoked more than 200,000 people to pack Philadelphia streets for the Liberty Loan parade, part of a national wartime fundraising effort. All hospital beds in Philadelphia were full within 72 hours. Although the historical narrative of the pandemic is compelling in itself, equally important is the contemporary relevance of questions raised: What is the responsibility of local, state, and federal government, of our fellow citizens, and our own responsibility, in the face of disease outbreaks and health crises? How would I cope in this situation? As a society, are we prepared to handle such an event today?

The Mütter Museum of The College of Physicians of Philadelphia requests a \$249,863 Museums of America grant from IMLS to support *Spit Spreads Death*, an exhibition opening October 2019 about the 1918-19 influenza pandemic in Philadelphia. For the past year, Mütter Museum staff have collaborated with a historical curator, art curator, and artist group to develop an implementation plan for an exhibition that will engage audiences by: 1). **Challenging expectations** about historical exhibitions using contemporary art and data analysis and visualization as the foundation; 2). **Inspiring critical thinking** among audiences about current and future health issues by exploring the connections between civic responsibility and public health during the pandemic; and 3). **Demonstrating the complexity and indeterminacy of history**, as scholars are still debating the impact of the pandemic and any examination of the topic tends to raise more questions than it answers.

Spit Spreads Death will be built on data from 20,000+ death certificates, and will feature an art film, digital interactives, objects and photographs, personal stories, and contextualizing historical and public health information. The Liberty Loan parade, the catalyst to the disease's rampant devastation in Philadelphia, was central in planning discussions about the exhibition. On the parade's anniversary, September 28, 2019, art group Blast Theory will lead community and health advocacy groups, artists, museum visitors, and relatives of influenza victims in their own parade, also the basis of the artists' film. Invoking the celebratory mood of New Orleans jazz funerals, this parade will serve as the only known public memorial for the victims—who suffered because patriotism was promoted over public health—and also honor people and organizations that, today, give voice to health issues facing individuals. The art film, as well as filmed interview segments with some of Philadelphia's leading epidemiologists, infectious diseases experts, and public health professionals, will provoke broader questions about how this specific historic public health event relates to broader health issues today. The digital interactives will personalize this catastrophic event: an animated digital map that tracks each death, showing how the pandemic spread in the city, and a neighborhood explorer where visitors can delve into the stories of particular neighborhoods and search by family names, addresses, and landmarks.

What need, problem, or challenge will your project address, and how was it identified? Front-end evaluation demonstrates that although the flu pandemic was one of the most catastrophic health crises to strike the city, it is a largely unknown story to our current Museum visitors. The lack of materials to exhibit makes the flu pandemic challenging to represent in a traditional historical exhibition. Due to the rapid pace of the disease—upwards of 12,000 people died in roughly six weeks in the city—there are few physical artifacts that connect specifically to the event. Although there are some primary sources (death certificates, newspaper articles, statistical tables, photographs, and first-hand accounts), there are few secondary sources about Philadelphia, so as a precursor to the exhibition, the project team is having to do much of this research.

Historians like Phillips and Killingray highlight the importance of the pandemic as a significant historic event and why it is poorly documented in historical accounts. Citing a tendency to overlook epidemics in favor of the political, economic, and military, they emphasize the importance of bringing such events into the historical

canon that currently exist mainly in individual and family memories. As the generation who experienced the pandemic has passed away and the following generation is aging, the risk of losing the personal stories of this event intensifies.¹ Other scholars explore the link between historical and future pandemics. Anthropologist Carlo Caduff examines the rhetoric of prophecy and preparedness around disease outbreaks, writing: “The great pandemic of 1918 has thus appeared as a dreadful warning sign from the past: It did happen. It could happen again.”² Though scholarly interest in the pandemic has increased in recent decades, a full reckoning of its short but severe impact and its enduring significance today is still lacking. Only a few historians have studied the event in Philadelphia in depth, noting how swiftly the disease spread through a city overcrowded with war workers and recent immigrants and the inadequacy of government response to the crisis.³

Who will benefit from your project? Over the past year, the project has already engaged the Museum’s audience of medical professionals, artists, students, historians, and tourists, who have followed the team’s blog posts, reacted to social media updates, participated in evaluation efforts and at events, and responded to a call for personal stories and artifacts. Despite this broad appeal, we will focus on three primary target audiences:

High school students (and teachers): The project will engage thousands of high school students who visit the Museum annually, as well as youth participating in the College’s after-school programming. New museum lessons, which align with PA curriculum standards on history, science, and health, will focus on topics compelling to teen audiences: personal stories, questions about civic responsibility, and the exploration made possible through the interactives. Discussion guides for teachers will inform their conversations with students around the connection between the pandemic and contemporary health debates and issues.

Young Museum visitors (ages 19–30): A recent visitor assessment demonstrates that roughly 56% of our visitors fall within this age group, with similar demographics among social media followers. We expect several aspects of the exhibition to resonate with this audience. The flu’s mortality struck this age group most severely, and the team expects that using some of the personal stories will strike a chord with young visitors. At the same time, because this generation is very removed from the pandemic, which has historically not been well covered, we know from front-end evaluation that this is a subject unknown but of interest to many.

Residents from Philadelphia zip codes that were hardest hit during the pandemic: The proposed exhibition will enable the Mütter to test the effectiveness of employing targeted neighborhood-based promotion and programming, directly relevant subject matter, and reduced or free admission to reach new audiences, a method used by other local institutions like the Philadelphia Museum of Art and the Fleisher Art Memorial. Once data analysis is complete, the team will select four zip codes that overlap with the areas selected for the neighborhood explorer interactive. The zip code selection will take into account representation of the most prominent ethnic groups living in the city in 1918 and neighborhood stability throughout the past 100 years.

How will your project advance your institution’s strategic plan? How will your project address the goals of the Museums for America program and align with the Learning Experiences project category? Throughout the last decade, the College has undergone major strategic shifts, dramatically increasing and expanding our audience. Key changes include the cultivation of a dialogue between science and the arts, a shift from a medical history to a medical humanities approach for museum exhibitions, and increased use of personal narrative and early audience engagement. *Spit Spreads Death* will be the first to incorporate all of these facets into one

¹ Howard Phillips and David Killingray, eds., *The Spanish Influenza Pandemic of 1918–19: New Perspectives*, Routledge Studies in the Social History of Medicine, 12 (London and New York: Routledge, 2003), 1–5, 12–15.

² Carlo Caduff, *The Pandemic Perhaps: Dramatic Events in a Public Culture of Danger* (Oakland: University of California Press, 2015), 8.

³ See, for instance, James E. Higgins, “Keystone of an Epidemic: Pennsylvania’s Urban Experience During the 1918–1920 Influenza Epidemic” (Ph.D. diss., Lehigh University, 2009), 71–116; Thomas Wirth, “Urban Neglect: The Environment, Public Health, and Influenza in Philadelphia, 1915–1919,” *Pennsylvania History* 73, no. 3 (2006): 316–42.

exhibition. The exhibition aligns with the College's strategic plan and fulfills objectives regarding increased educational and outreach programming and improved visitor experience. The exhibition will advance the strategic goal to deepen engagement with College Fellowship due to the strong public health focus and as the first major exhibition to feature contemporary members of the College's Section on Public Health and Preventive Medicine and Fellows (through filmed interviews). Closely aligning with the goals of the Learning Experiences category, the exhibition draws on the experiences and insight of other museums and historians and will incorporate multiple methods of content delivery; raise provocative questions; provoke self-reflection, curiosity, and empathy; challenge expectations; and incorporate audience feedback into the final product.

Project Work Plan

Who will plan, implement, and manage your project? Robert Hicks, PhD, Director of the Mütter Museum and Historical Medical Library, and Museum Special Projects Manager Emily Snedden Yates, MFA, will manage and oversee the project, working closely with art curator Trevor Smith, Peabody Essex Museum, Matt Adams of Blast Theory, and historical curator Jane E. Boyd, PhD, all of whom have been planning the exhibition for the past year. The team has engaged exhibition designer Keith Ragone and Oberg Research, evaluation consultants, both of whom have previously worked with Museum staff. In May 2017, the team held a public panel, where Nicholas Bonneau, historical epidemiologist, offered insight about using data from death certificates; he has now been engaged to oversee the collection, transcription, and analysis of the 20,000+ death certificates. Michael Tedeschi and his firm Interactive Mechanics will develop the interactives and prototype them with Museum visitors. Lastly, the team will hire a community liaison to coordinate the partner organizations and interviewees, and assist in promotion and programming for the targeted zip codes and a digital assets coordinator to manage rights and reproductions for images to be used in the exhibition.

What specific activities, including evaluation and performance measurements, will you carry out?

1. A commemorative parade that memorializes the victims of the 1918 Philadelphia flu pandemic, while honoring health professionals advocating for the health of Philadelphians today.

The Liberty Loan and performative parades both embody the compelling themes of the exhibition—from devastating loss to resilience and from civic agendas to public health concerns. The contemporary parade also provides an opportunity to memorialize the dead for the first time and recognize the local health organizations who work to ensure that no civic agenda overshadows the health needs of Philadelphians. Blast Theory will work with the community liaison and College staff to identify and engage additional public health professionals and medical experts, representatives from community health and health advocacy organizations, artists, and members of the public, including descendants of influenza victims. Though the framework for the parade is set, Blast Theory will facilitate planning sessions to involve these participants in shaping the parade and the design and construction of the float. On September 28, 2019, Blast Theory will lead participants in a parade that will follow part of the original route, and evaluators will survey participants and spectators at the event.

2. A multi-faceted exhibition that encourages non-linear exploration.

Rather than aiming to tell one particular story through the exhibition, we are hoping to raise questions and embrace the complexity and indeterminacy inherent in the topics we are exploring. Particularly through our use of data analysis and visualization and the free form of our exhibition design, the team draws from museum consultant Elaine Heumann Gurian's talk, "The Importance of And," in which she urges museums to use complexity theory to create non-linear and non-hierarchical exhibitions without definite conclusions.⁴ The look and feel of the exhibition will capture the energy, density, industrial character, and modernity of the city at the time, incorporating colorful wartime posters, austere typography of warning signs, and contextual photographs

⁴ Elaine Heumann Gurian, "The Importance of And," MuseumNext, Melbourne, Australia, 2017, <https://www.museumnext.com/insight/the-importance-of-and/>.

of the city. The exhibition will mainly be organized within individual kiosks that, depending on the content, may include object cases, supports for screens, or supports for graphics. The visitor will be able to navigate the exhibition freely, following his/her own path of interest through all the exhibition components. One exhibition kiosk will display short-term loans from area institutions, community members, and the College's Library. Examples include: a cloth handbag a young woman purchased as a Christmas gift, but never gave because of her death; daily letters a worried student at quarantined Bryn Mawr College wrote home to her parents; and photographs of seminarians digging trenches for mass burials, surrounded by stacks of coffins.

Responses from Oberg Research's fall 2016 front-end evaluation indicated interest in personal stories, how the pandemic began and spread, and how it affected different neighborhoods; focus group participants specifically wanted to see the spread of the pandemic in map form. The team was mindful of this feedback throughout the planning process, along with the challenges presented by the lack of objects and the commitment to embracing the complexity of the subject matter. *Spit Spreads Death* will explore the pandemic through three primary themes: *Patriotism and Propaganda*, *Civil Society in Crisis*, and *Remembrance and Memorialization*. Commemorating the centennial of the pandemic, the exhibition will tell the stories of the Philadelphians who experienced those terrifying weeks and months in a city mobilized for wartime. Oberg will test specific components (Interactive Mechanics will conduct user testing for interactives) and hold exit interviews.

Data, rather than objects, as the foundation: To our knowledge, no one has tried to map the pandemic in Philadelphia. There is no detailed information on infections, only rough estimates. Fortunately, by 1918 the PA Department of Health had begun to issue official birth and death certificates. In a partnership with the genealogy website Ancestry.com, these certificates held at the PA State Archives were partially transcribed, digitized, and are in the public domain. Each certificate opens a window into the life a person who is otherwise unknown; August Abt, a 33-year-old "horseshoer," born in Pennsylvania to a German-born father and French-born mother; and Eliza Boney, an African American born in North Carolina, who "kept house for husband" in North Philadelphia, in the early stages of pregnancy when she died just before her twentieth birthday.

Bonneau, working with Boyd, will manage the complex process of transcribing the 40 or so fields on the 20,000+ death certificates. The resulting data will provide the most complete and granular picture of the pandemic's spread and toll in Philadelphia to date. Making this valuable information available to download through the online interactives will allow future researchers to mine the data further for insights into the demographics and social history of the city. For the purposes of the exhibition, we are using this information to help give visitors a visceral experience of what it was like to live and die during the pandemic.

An original art film and filmed interview segments by Blast Theory: The original art film and interview footage will be situated with historical imagery from 1918, including images from the Liberty Loan parade. The film will play on a prominent wall or kiosk near the gallery entrance and one or more of the exhibition kiosks will feature the interviews, making the space active and dynamic as visitors move through the gallery on a freely chosen path. The two parades serve as bookends for the century between this catastrophic event and today, prompting reflections about their relationship to one another, and will be the point of entry for visitors to the exhibition. The film will be a work of reflection, recording the contemporary parade and the relationships that it embodies, while providing a vehicle for ongoing consideration. It will evoke ideas of individual and collective will and responsibility. Experts in epidemiology, infectious diseases, and public health, such as College Fellows Paul Offit, MD, Stanley Plotkin, MD, and Robert Sharrar, MD, will provide important contemporary perspectives. Footage from these interviews will be released as part of a digital strategy led by Blast Theory and coordinated with the overall communications strategy for the exhibition; the digital strategy will allow broader questions and conversations to thrive on social media platforms, as well as in the exhibition space.

The story of citizens and neighborhoods through two digital interactives: The Map Animation will provide a looped representation of the number of deaths shown across the city, day-by-day. Visitors will be able to use a tablet to control the information displayed on the map to see how different demographics or populations were impacted by the epidemic (display options: race/ethnicity, gender, age, and immigration status). It will conclude with an estimate of the death toll if a similar pandemic occurred in the city today. The Neighborhood Explorer will allow visitors to delve into the data on a neighborhood level. Using a touchscreen, visitors will select a neighborhood or location of interest (historic landmark, the museum itself, or their address) to zoom in on that area. Deaths from influenza will be presented on the map. Four selected neighborhoods, chosen to represent the diversity of the city's population, will have additional in-depth content, allowing visitors to see detailed demographic data, photographs of the area, death certificates, personal stories, newspaper headlines, and other information, including what the neighborhood is like today. We will also adapt both interactives for use on the Mütter's website, reaching a wider audience (see Supporting Document #2 for more exhibition information).

3. Engaging public programming targeting new and existing audiences.

Programming has been designed with the Mütter's broad audience in mind, but also with particular attention to the project's primary target audiences. It will begin prior to the exhibition opening and continue afterwards. The College's Center for Education will work with the community liaison to offer two programs in each of the target zip codes that incorporate free flu shots, exhibition information, and a related activity like sign-making for the parade or memorial art. The community liaison will work with senior centers and community centers to identify older residents of the neighborhood who may wish to share their memories; the interviews will be disseminated via social media. We will partner with Hidden City to develop a tour for each of the target neighborhoods that combines sites and personal stories related to the pandemic with broader contextualizing information about the city's history, architecture, and neighborhood evolution. Modeled on a silent film series that is extremely popular among the Mütter's younger audience, a quarterly film series will feature a medical expert speaking briefly about the science behind the movie theme, followed by a film related to the exhibition. Following focus groups with teachers, resources will be created to enhance school visits. Two new Mütter Lessons will be created to complement the exhibition and class tours. Possible lesson topics include *Urbanization and Public Health* and *Epidemic! 100 Years of Emergency Preparedness in Philadelphia*. In addition, subsidized field trips will be offered to high schools serving the target neighborhoods to ensure those students are able to visit.

When and in what sequence will your activities occur?

Aug. 2016 – Aug. 2017	Planning efforts supported by the Pew Center for Arts and Heritage (PCAH)
Sept. 2017 – Aug. 2018	Interim period, anticipated PCAH grant—July. Boyd/Bonneau oversee collection, transcription, and analysis of 20,000+ death certificates; Boyd finalizes object and loan list; staff secure loans; Boyd and intern research neighborhoods for interactive.
Aug. 2018- Sept. 2018	Smith and Blast Theory (BT) meet with team in Philadelphia and hire community liaison; Ragone completes conceptual exhibition design.
Oct. 2018 – Jan. 2019	IMLS grant period begins. Interactive Mechanics (IM) planning and discovery; Boyd/Ragone complete schematic phase.
Jan. 2019 – July 2019	IM user testing: March, May; development of interactives; BT parade planning; community programming begins; Boyd/Ragone complete design and text and graphic design; Ragone completes construction documents.
June 2019 – Sept. 2019	IM installation and documentation; BT interview filming and float construction; anniversary parade on Sept. 28; Hidden City tours begin.
Oct. 2019 – Sept. 2020	Installation and exhibition opens on Oct. 17; grant-funded programming continues.

The project team has agreed to the timeline (Supporting Document #5) and Yates will manage the schedule to ensure that all deadlines are met. The plan incorporates ample support personnel and partners to manage project tasks, and the full team will continue monthly conference calls (at the least) to coordinate all project facets.

How will you track your progress toward achieving your intended results? How and with whom will you share your project's results? We will engage Oberg Research, which evaluated significant IMLS-funded projects like the Civil War exhibition (see Supporting Document #13) and digital exhibition, *Memento Mütter*, both of which used outcomes-based evaluation methods. Oberg conducted front-end evaluation in the form of visitor surveys and focus groups in October 2016. They will be engaged to conduct formative evaluation of specific project components and a summative evaluation of the entire project (see Supporting Document #6).

The Mütter Museum has been quite successful using word-of-mouth and low-cost social media initiatives. The methods we propose to use for *Spit Spreads Death* would therefore include some unique elements compared to our previous exhibition launches. Using traditional, cohesive paid advertising placements alongside attention-grabbing media efforts and a robust online campaign would be a novel approach for us, with a goal of reaching audiences not often captured by our current efforts (see Supporting Document #7). The project team will also continue to write blog posts and expect to participate in professional and scholarly conferences, speaking about the use of data, the collaborative process, and exhibition development that does not rely on objects.

What are the risks to the project and are they accounted for in the work plan? The connection between the historical and the contemporary, without fully knowing what “the contemporary” will be in October 2019 or thereafter, demands flexibility in the project plan. It is possible the political climate will change dramatically or there will be a major new disease outbreak. A section of the physical exhibition will allow new content to be presented as needed, particularly to acknowledge world events involving disease outbreaks. The use of social media will also provide opportunities to highlight and address unexpected developments.

What time, financial, personnel, and other resources will you need to carry out the activities? In addition to the key staff and consultants hired to support the project, Museum staff receive support from other College departments in the form of payroll and accounting, grant report management and writing, public relations and marketing, website and technology, buildings and maintenance, and visitor services, among others. To support the full budget, the College is applying for a Project Grant from the Pew Center for Arts and Heritage. The College also plans to support the project through the allocation of state general operating funds, a restricted trust for the Museum, and the College's operating budget. The exhibition will also be supported by the College's Section on Public Health and Preventive Medicine, which will provide access to some of Philadelphia's leading epidemiologists, infectious diseases specialists, and public health professionals, as well as connections to many of the city's community health and health advocacy groups.

Project Results

Relevant IMLS Performance Goal(s) and Performance Measure Statement(s) and Project Impact: Through *Spit Spreads Death* and related programming, the Mütter will provide inclusive and accessible learning opportunities for a wide range of audiences. A comprehensive evaluation conducted by Oberg Research will measure the effectiveness of meeting the outcomes outlined below, as well as this performance goal.

Though *Spit Spreads Death* aims to increase both interest in and an understanding of the 1918 flu pandemic in Philadelphia, needs that are expressed by current Museum visitors and historical scholarship on the subject, the exhibition will not provide a singular answer or narrative for Museum visitors. Rather, the team relies on Gurian's approach of embracing the complexity and indeterminacy of this event and the contemporary health matters it brings into conversation. Specifically, the exhibition aims to stimulate introspection about personal and community responsibility and inspire actions that include disaster planning and getting flu shots.

Some visitors might find intriguing the personal information about those who got sick and died so quickly, perhaps relating to that person's profession, family relationships, or where they lived. For others, the experience

might focus much more on how to ready oneself for future pandemics, given the fast progress of the flu and how a city could be destabilized even with prior knowledge of the threat. For others the thread of interest might be more political in nature, questioning how civic responsibility relates to public health, both historically and in contemporary society. For many visitors, it will likely be some combination of perspectives that draws them in.

How will the knowledge, skills, behaviors, and/or attitudes of the intended audience change as a result of your project? The themes of *Spit Spreads Death* are so universal, particularly for local audiences, that most of the outcomes will be the same for all target audiences.

Changes in knowledge:

- increased awareness about the significance of the flu pandemic in Philadelphia's history, the devastating scope of illness and death, and the role that the Liberty Loan parade played
- understanding of the connections between historical and contemporary public health
- understanding specifically of how the pandemic impacted one's own neighborhood and the people living in that neighborhood in 1918
- ideas about how this historical narrative relates to a wide range of subject matter and curriculum standards (high school teachers)

Changes in attitude:

- heightened engagement due to an empathetic response, particularly to the personal stories included
- contemplation of the role of civic responsibility in pandemics and health crises
- altered expectations about historical exhibitions

Changes in behavior:

- get a flu shot (adult target audiences)
- come to Mütter Museum exhibition or event for the first time (residents in target zip codes)

What tangible products will result from your project? The primary product resulting from the project is an exhibition rooted in data and art that integrates historical images, documents, and artifacts, as well as: a parade performance with float created through community engagement; filmed interviews with public health and medical professionals; an original art film by Blast Theory; two digital interactives with web versions; and the transcription with analysis of at least 20,000 death certificates, available for scholarship as well as for the exhibition. Additional outputs include a committee/network of public health and community organizations and a significant advertising, public relations, and social media campaign.

How will you sustain the benefit(s) of your project? The planning process for *Spits Spreads Death* marked an intentional shift for the Mütter Museum—one that includes a deep level of audience engagement from the outset of planning, an intensive collaboration with historical and arts perspectives, the continuation of a medical humanities interpretive approach that relies heavily on personal narratives, and an emphasis on the connectivity between historical and contemporary health issues. This shift and the experience gained by Museum staff will inform future exhibitions and programming at the College. Similarly, we expect that the impact on our visitors will be sustained as well. Visitors will not only learn about an isolated historical health event. They will be prompted to deeply consider the lives of other Philadelphians, changes in neighborhoods, broad questions about the role of government and communities in our current health climate, and the possibilities of future pandemics. The team expects the exhibition will be up for five years or more, and the College is committed to covering the costs of necessary maintenance, rotating the temporary exhibition section, continuing programming and promotion after the conclusion of the grant period, and interacting with social media audiences throughout the life of the exhibition.

