

## ***Intervals - Episode 8***

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## **Introduction**

CHRISTOPHER BRICK: Hello everyone and welcome back to the *Intervals* pod, a public humanities initiative of the Organization of American Historians.

I'm Christopher Brick, here on behalf of the OAH Committee on Marketing and Communications, and here as well to welcome our eighth guest lecturer of the series, Dr. Kelly Hacker Jones.

Kelly is a public historian based in Brooklyn, New York and in past her work has been featured in programming for the Museum of the City of New York and for the Medical Heritage Library, but it's her research into the history of the 1893 smallpox

epidemic in Muncie, Indiana that is what brought her to all of us today.

Muncie, Indiana holds a noteworthy place in the history of American culture and letters because of the high-profile case studies that sociologists Helen and Robert Lynd conducted of it in the 1920s and 1930s. Anonymized as "Middletown" in the published studies, Muncie was selected for deep examination by the Lynds in the belief that it resembled a completely quintessential American community and cityscape for the time. Its very ordinariness, if you will, is what the Lynds decided made it worthy of the deep attention they gave the small east Indiana city in the two volumes of sociology that they developed around it. Even Muncie's designated nom-de-plume, "Middletown," conveyed plain, unpretentious conventionality.

And so it's noteworthy that the Lynds open their study in the early 1890s, shortly after, as they note in the published volume, "the gas boom was over in Middletown and the panic of '93 and the smallpox of that summer put the town on its back," forcing the community to adapt in ways that the Lynds regarded as the beginning of Muncie's municipal adolescence.

The summer of 1893 was an eventful one in Muncie, Indiana. Five years previously, natural gas had been discovered in the area, sparking an industrial boom. At 20,000, the population was triple what it had been at the time of the discovery. Early in the summer, a nation-wide financial panic sparked runs on several local banks. And in August, rumors circulated that in the working-class neighborhoods south of the railroad tracks - among the factories

generating much of the city's prosperity - smallpox had been discovered.

Muncie's City Health Officer, Dr. Frank Jackson, acted quickly: active cases were isolated in their homes, the district surrounding infected households placed under quarantine, and those in close contact with victims were vaccinated.

Yet, as the board of public health soon learned, cases of "black chickenpox" had been occurring in the area since May, none of which were reported to the health officer. Jackson was convinced these cases had, in fact, been smallpox, which meant the disease was further spread than initially thought. His accusations of negligence against fellow doctors and issuance of quarantine and vaccination orders beyond the infected district irked many Munsonians, several of whom believed the epidemic threat to be nonexistent or overblown.

Quarantine, they asserted, was an unfair infringement on civil liberties and bad for business. Worse: vaccination, it was rumored, carried also the germs of tuberculosis. Over the ensuing three months, smallpox infected 150 individuals, leaving 22 dead.

In her lecture, Kelly delves into the controversy and drama that erupted during the Muncie smallpox epidemic of 1893. As nationwide, municipal governments improved public health infrastructures, this episode of disease outbreak in one mid-sized city highlights the growing pains that ensued when medical authorities clashed with popular priorities regarding health and safety.

And with that I give you Dr. Kelly Hacker Jones on "An Eruptive Fever Comes to Muncie."

### **Lecture**

KELLY HACKER JONES: Twelve-year-old Charlie Trestle had a fever. His head ached and his arms and torso were covered in a red rash that was beginning to blister. His parents R.F. and Mary were worried. For the past month, their neighborhood on the south side of Muncie, Indiana had been surrounded by red flags and quarantined patrolmen, placed there because smallpox had been reported in several homes in their neighborhood.

It was September of 1893, school had been canceled, and keeping a twelve-year-old boy indoors, especially with playmates gathering at nearby Heaken Park, was no easy task. Charlie was the eldest of four siblings. His youngest brother was only two years old. The family had just moved to Muncie a couple of years prior. Charlie's father, R.F., short for Randolph Franklin, worked as a carpenter and his mother, Mary, took care of the home and children. It had been a difficult year. A national financial panic and subsequent runs on local banks had slowed industrial outputs and new construction. And now, their son had smallpox.

At the start of the outbreak, public health officials had enacted domiciliary quarantine, meaning those who had fallen sick were allowed to convalesce at home with their families. This was provided no members of the family left the house. A city-funded smallpox hospital, some locals called it the "pest house," had opened on September 8<sup>th</sup>. Three days later, the city common council ordered

that all infected citizens be removed to the hospital, regardless of their personal wishes.

Which is why, on the afternoon of Monday, September 18<sup>th</sup>, a wagon driven by Deputy Joe Daily, accompanied by two hospital guards, had pulled up in front of the Trestle house. R.F. and Mary Trestle had surely heard some of the scandalous rumors surrounding the public health authorities and their handling of this outbreak.

Some local doctors insisted that smallpox was not even present in the community, merely some lesser disease known as black chickenpox or waterpox. Some of the guards in charge of patrolling the infected district and delivering supplies had been found drunk on duty. Dr. Garrett Lee, the physician who was in charge of the district, was likewise accused of inebriety. Some claim the nurses on duty at the hospital were negligent in their duties, leaving patients unattended for hours at a time.

To surrender their son to the care of such as these was unthinkable. Trestle greeted the police at his front door with a revolver in hand. The men were welcome to enter the house to examine his family, but the first to lay a hand on his son to take him away, he said, would be shot. Policeman Daily presumably thought that Trestle could be reasoned with, and so pushed open the door. Despite Trestle's prior assurance, he drew his gun and fired, grazing Daily's left pinky finger.

The hospital guards had already sent for Police Chief James Miller, who arrived on the scene shortly thereafter. After a long conversation, Trestle agreed that Charlie would be taken to the hospital, but he, the boy's father, would remain

there with him until Charlie recovered. Charlie Trestle was one of the lucky ones. He suffered a mild case of the smallpox and recovered. Between mid-August and early November 1893, approximately one hundred and fifty residents in Muncie fell ill with smallpox. Twenty-two died and a number suffered severely and were left with permanent facial scars.

From a 21<sup>st</sup> century perspective, perhaps the most surprising element of the 1893 epidemic, is that it happened at all. Smallpox is one of the oldest diseases known to man. By the time Charlie took sick, a vaccine had existed for decades and recent advancements in manufacturing had rendered it generally safe and widely available. Quarantine measures were also highly effective, as smallpox is transmitted by close contact with an infected person or their personal possessions.

Yet, a number of Munconians that summer refused to believe that smallpox had arrived in their city or that the city board of health were justified in enforcing such public health measures. Today, we're going to explore why a well-known, highly contagious disease led to a swirl of controversy in an up-and-coming midwestern city.

Though a short, relatively minor episode in the history of modern medicine, it encapsulates the extent of the damage that can be done when distrust of public officials collides with a deadly disease. Let's start with the disease itself. Smallpox is one of the oldest epidemic diseases known to humans, characterized by a high fever and pustules that cover the victim's face, arms, and legs. The disease frequently led to sores in the mouth and throat and could also attack the internal organs.

This, combined with the high fever, is how it killed.

Smallpox was usually fatal in twenty-five to thirty percent of cases. Survivors were typically pock marked for life. The virus commonly spread either through direct contact with an ill person or by contaminated blankets and clothing. Some listeners will be familiar with the infamous smallpox blankets that European settlers gifted to the Native Americans during the period of European colonization in North America.

An infected person was contagious for one to two days after being exposed until the last scabs healed and fell off. This could take up to three weeks after initial infection. When it appeared, smallpox was often greeted with panic and terror. Smallpox also bears the distinction of being the first to be eradicated through human action, namely through vaccination. Since the mid-18<sup>th</sup> century, Europeans have been familiar with inoculation, which was the practice of purposefully collecting infected material from a person with a mild case of smallpox and then transmitting it to an uninfected person, which usually resulted in a milder form of the illness, but still conveyed immunity.

Then, in 1796, English physician Edward Jenner began his experiments with a new form of inoculation, this used cowpox. He'd observed that dairy maids and farm hands that had come into contact with the bovine disease were insusceptible to smallpox infection. His experiments consisted of intentionally infecting patients with variola vaccinae, which was Latin for smallpox from cows, and then later exposing the subject to smallpox. This gave rise to the modern practice of

vaccination, but inoculation remained in use in many areas, as obtaining safe and effective vaccine material was sometimes difficult into the late 1800s.

By 1980, after a massive vaccination effort by an international team of physicians, the World Health Organization finally announced that smallpox had been eradicated. So, what did a smallpox outbreak mean for Muncie? In the 1980s, America was in a period of rapid industrialization and urbanization. New technologies and advances in manufacturing led more and more people to leave rural areas and settle near cities and towns where new jobs were available. These new cities were forced to grapple with the challenges of population growth and how to serve this new public interest, and Muncie was no different.

In 1983, Muncie, Indiana was a booming city with a population approaching twenty thousand. Less than a decade prior, it had been a rural county seat of six thousand citizens, majority white and Native-born. Maps from the era show development situated on the bluffs of the White River in Delaware County, with three sets of railroad tracks that cross through its southern edge. Natural gas was discovered in the region in the fall of 1886, setting off an industrial boom. Manufacturers were told they could power massive factories for a mere twelve dollars a year.

Investors flooded in the from the east coast to assess conditions. Most famously, the Ball brothers, the makers of those iconic glass canning jars, moved their glassworks from Buffalo to Muncie in 1888. Real estate values tripled. Massive torches were lit in the countryside surrounding the

city, wasting gas in the amount of ten thousand dollars a day in the estimate of the Indiana state geologist. Boosters claimed that the gas supply would last seven hundred years and within five years the population would reach fifty thousand—neither of these predictions came true. However, overnight, the city gained nicknames such as “The Eldorado of the West,” “The Home of the Industrial Genie,” and “Magic Town.”

By 1890, a quarter of the city's population were employed in manufacturing, ranging from glassware to ironworks to shoes and clothing. The following year, a citizen's enterprise committee was formed by some of the city's leading businessmen. They raised two hundred thousand dollars, a fund that was used to entice industrialists to the city by offering them free land or building funds. Cities across the gas belt and central Indiana competed for these new industries that would bring jobs, workers, and tax revenue.

Most of these new industrial concerns, located in the previously underdeveloped areas south of the Muncie railroad tracks, with working-class housing springing up among them, it was in these neighborhoods that most of the city's newer residents, families like the Trestles, would settle, drawn by the promise of steady work. To the west of the district, an even more removed, poorer area sprang up, which the city health officer would later describe as, “thickly settled and destitute,” where anti-vaccination sentiment was rife.

These two neighborhoods would bear the brunt of the epidemic. With a population influx such as Muncie experienced, one can reasonable conclude that city resources, such as water, sewage, and drainage,

would be quickly overwhelmed, creating opportunities for diseases to spread.

In an 1895 pamphlet, city boosters emphasized the availability of natural resources to combat the problems of epidemic diseases, particularly typhoid fever and other intestinal diseases, which were so common in urban areas.

Muncie drew its water from an artesian well field outside the city, providing residents with safe, clean drinking water. Sewage was flushed into the White River west of the city, downstream. A recently installed garbage incinerator handled the city's refuse, and access to natural gas for heating ensured both health and comfort as it eliminated the need for coal fired furnaces, with in so many cities generated dangerous pollution and soot. These were indeed important features to promote.

19<sup>th</sup> century cities were known as hotbeds of filth and disease. Overcrowding, air and water pollution, and the increased speed of transportation via steamships and railroads all facilitated faster and wider spread of disease-causing microbes. In New York, the nation's largest cities with over 2.6 million residents, diseases such as tuberculosis and typhoid were endemic.

Chicago, with a population of one million, was plagued by cholera and other water-born illnesses. In 1887, engineers there famously reversed the flow of the Chicago River, so that it flushed the city's sewage via canal to the Des Plaines River, and ultimately to the Mississippi.

Even more modestly sized midwestern cities, such as Milwaukee, Wisconsin, with a population of just over two hundred thousand, faced repeated epidemics of smallpox and diphtheria.

Recognizing the dangers posed by a population influx, the Muncie city council appointed its first full-time health officer in 1892. The position went to Frank G. Jackson, a thirty-five-year-old doctor and Muncie native. Jackson had taken training with a local doctor prior to enrolling in the Ohio Medical College at Cincinnati. He was active both in the Indiana state medical society and the American medical association.

As health officer, Jackson was responsible for keeping records of contagious diseases, recommending new public health regulations to the city's common council, and overseeing the city's water, sewer, and garbage incinerator works. Prior to Jackson's appointment, the city government had only appointed health officers as an emergency response such as during the 1876 smallpox epidemic. Once that public health crisis passed, the health officer had been dismissed.

Jackson embodied two interrelated developments in late 19<sup>th</sup> century medicine. On the one hand, he was tasked with promoting municipal governments responsibility for and authority over matters pertaining to the public's health, even when there was no epidemic threat. Jackson also, as a member of state and national medical societies, would have been interested in advancing the cause of regulating medical practice to exclude non-regular physicians. This reflected a long-standing rivalry between physicians of differing schools of thought about medicine and the body.

The existence of differing types of practices originated early in the 19<sup>th</sup> century. Back in the 1830s, we had the rise of Jacksonian democracy, a period during which the authority of elites and experts had been devalued, and the medical profession was not immune to this. Many states loosened or repealed their medical licensing laws, allowing for a "free medical marketplace," in which healers of many stripes were equally allowed to compete for patients.

The same happened in Indiana. It wasn't until 1885 that the state legislature enacted a law requiring anyone practicing medicine, surgery, or obstetrics to obtain a license from their county clerk. This was accomplished by producing a diploma from a reputable medical school or by providing proof of residency and medical practice going back for a period of ten years. Until more specific state-wide guidelines were established in 1897, it was largely left to the county clerks to evaluate an applicant's qualifications.

By the 1890s, Hoosier medical practitioners generally belonged to one of four systems or schools of medicine. The largest, the regular, or allopathic school, of which Jackson was a practitioner, sought to present itself as the most scientifically grounded of the schools. In 1886 for example, the AMA formerly endorsed the germ theory of medicine, which was the hypothesis that each disease was caused by a specific microorganism that invaded the body.

Prior to the germ theory, however, regular physicians were no different than other physicians or the general public in their belief in balancing

the body's humors. Regulars were especially known for treatments such as bloodletting or administering mercury to induce vomiting, a reputation that was difficult for them to shake. And even as late as 1889, a survey of members of the Indiana Medical Society showed that a significant number of its members didn't even believe that microorganisms really caused disease.

Homeopathic practitioners following the theories of Samuel Hahnemann prescribed cures based on the principle of "like cures like" and the law of minimum dose. They were often scorned by regular physicians for prescribing inept, diluted drugs. However, homeopaths did develop a large following in the mid-19<sup>th</sup> century due to the gentleness of their cures in the contrast with the regulars. A third school, the physio-medical school, relied on botanical formulas; it was the smallest of the four. But the fourth school, the eclectics, were so named for their tendency to borrow freely from all these other systems of healing, requiring only that the therapies they used had been proven to work. These therapies were supposed to support, rather than deplete the patient's system.

In Muncie, eclectic practitioners posed the greatest challenge to the dominance of the regulars. All of this probably sounds like esoteric detail, but during the 1893 smallpox outbreak, professional rivalries among Muncie's doctors took front stage.

Compounding these professional rivalries was the new interest in and differing interpretations of the germ theory of disease. Based on the work of European scientist Louis Pasteur, Ignaz Semmelweis, and Robert Koch, which was completed between the

1840s and the 1880s, germ theory was only gradually accepted by Americans. Many still subscribed to the zymotic, or miasma, theory of disease, which held that diseases were the biproduct of decaying filth in the streets, sewers, and waterways.

As a result, outbreaks of any disease were often met by mass campaigns to clean up streets and public spaces, which were in any case beneficial to the general public health. However, when it came to the question of the vaccination, if you believed that general environmental conditions spread disease, vaccination would prove unnecessary. I'll return to the issue of vaccination later, but first we should examine how the smallpox outbreak was discovered, and the initial measure taken to control it.

When Dr. Jackson and the county health officer, Dr. Huey Cowing, discovered the first cases of smallpox in August, they also learned that another doctor may have already known of the disease. Dr. Robert A. Bunch was accused of hiding cases of smallpox in the Maran and Shuttleworth families. Jackson was informed that these two families had been treated by Dr. Bunch in May for cases of "black chickenpox." Allegedly, a severe form of that less deadly disease.

Jackson was convinced that "black chickenpox" was a misdiagnosis. Bunch was either incompetent or had been deliberately trying to hide an outbreak of smallpox, because such an outbreak would necessitate enacting quarantine and vaccination orders. Bunch responded to these accusations through letters published in the Muncie Daily Times, asserting he knew his patients better than the health authorities could.

Cowing also responded in print with language that painted Bunch as a quack and a fraud. Dr. Bunch, we should note, graduated from the eclectic medical school in Cincinnati in 1881. He had first located in Northeastern Delaware County, and had served as physician to the poor for Liberty Township. In 1889, he relocated to Muncie, presumably to build his practice among the cities burgeoning population. Bunch had a reputation as the "poor man's friend," and, it was said, never turned away a patient who couldn't pay his fee.

Many of his patients lived in Muncie's south side neighborhoods. And he was also, as came out later in the epidemic, and anti-vaccinationist. Bunch and other local physicians who weren't working with the city to contain the epidemic, regularly published remarks in the local press that castigated the local health officers for over-stepping their authority. They also downplayed the severity of the disease. Dramatic professional rivalries such as this was good fodder for the local press.

At the time of the epidemic, Muncie boasted three daily newspapers as well as a couple of weekly ones. The three daily papers each displayed characteristics common to the press in the Gilded Age and the early Progressive Era. Allegations of corruption in the city's awarding of contracts to suppliers of medical professionals, in an era in which municipal corruption was generally common, routinely made the front pages.

While two press organs, The Morning News and The Daily Times, tended to side with the authorities in their town, The Daily Herald more frequently published anonymous tips and letters to the editor

that questioned the city's power to enforce quarantine and vaccination. For example, the papers were quick to publish any and all speculation regarding the origin of the outbreak. Regardless of a paper's editorial position, a disease outbreak was bad for business overall.

Proof that it originated elsewhere could demonstrate that Muncie itself was not inherently dirty or disease-ridden. Some reports placed blame on recent visitors who had gone onto the Chicago's World Fair or to other cities out East. Another reporter blamed a run on the Citizen's Bank of Muncie, which had occurred in the wake of the nation-wide financial panic that summer.

Allegedly, in order to meet the withdrawal orders, bankers had opened parcels of cash that had been in the vault for some time, and the germs of smallpox must have laid and waited on these bills that were minted in New York and Philadelphia. The papers also perpetuated the idea that the disease going around wasn't even smallpox, but it was some other, milder, disease. A doctor visiting from Cincinnati informed the press that he had inspected patients himself and concluded that they had waterpox, a disease similar to smallpox, but conveyed by contaminated drinking water.

I should note that a medical textbook published in 1889 lists waterpox as a synonym for chickenpox. As a result of these stories, Jackson's biggest challenge became persuading citizens that smallpox was indeed in their midst. As he later reported, the townspeople were so generally convinced the disease was not present that they "became dangerously careless and, by their indifference, aided very much in the spread of the disease."

To counter these claims, Jackson went into a few of the homes and photographed patients exhibiting the severest symptoms. Copies of these photographs were placed in prominent places on the city's main streets. Two of these photographs were reproduced in the public health reports published after the epidemic. One shows a girl of thirteen, her face and arms covered with large, round blisters. The second shows a man, aged twenty-two, similarly covered.

Even to those unfamiliar with smallpox, the appearance of these patients is alarming, yet many Munconians continued to go about their business, perhaps assuming the disease would remain confined to the infected district. As described at the beginning, the first measure taken to limit the spread of the disease was to mark off the infected district with red flags. This was a traditional marker of public health danger.

Guards were hired to patrol the neighborhood and keep folks from entering or leaving the area. Most of these guards were laborers and industrial workers who had been laid off during the financial panic. These guards were required to deliver food, milk, and medical supplies by placing them at safe distances outside the homes. When hired, Jackson informed them that they would each be paid three dollars a week. For perspective, the average laborer could make up to twice that prior to the financial panic. Making matters worse, the city council later only approved a salary of a dollar fifty a week. Half of this was to be paid upfront, and the other half would be paid when the epidemic was over.

On August 29<sup>th</sup>, twenty guards walked off the job in a strike action. Most of these men never returned to their posts and it took several days for the public health officials to find replacements. Dr. Cowing would later assert that these men had done their jobs poorly, anyway, considering smallpox continued to spread.

A week following the strike, there were new cases discovered outside this infected district. It was clear to the doctors in charge, that a more centralized, hospital-based quarantine was necessary. However, the city was still in murky legal territory. As recently as 1886, the Indiana State Attorney General had announced towns facing outbreaks of contagious disease that, so long as home quarantine was satisfactory, no one had the authority to remove a person inflicted with contagious disease to a pest house or hospital. Therefore, on September 7<sup>th</sup>, the city council enacted a city-wide quarantine.

All public meetings, schools, churches, social clubs, theaters, and ball fields were to close until further notice. All residents were to be vaccinated. It should be noted that the quarantine order did not extend to manufacturing, local businesses, or salons-- a point that local religious leaders would criticize repeatedly. But citizens were urged to remain at home as much as possible and police officers were instructed to arrest anyone who was found loitering.

A health instructor was stationed at the railroad depot, and anyone trying to enter or leave Muncie by train had to provide a certificate of vaccination and allow their baggage to be fumigated. Smallpox continued to spread. In mid-

September, just before Charlie Trestle became sick, the city began to enforce hospital quarantine. Patients, even with mild cases, had to go to the hospital and their household members had to be vaccinated. They would remain there until the last of their scabs fell off and they were no longer contagious. Restrictions on public gatherings remained in effect. The idea of going to a hospital in 1893, invoked very different feelings than it would for us today.

As historian Charles Rosenberg has documented, well into the 19<sup>th</sup> century, most city-run hospitals were charity organizations. For most Americans, there was a stigma around being admitted to a hospital. It meant that you were too poor to afford private care. Public hospitals were perceived as places for the very ill and indigent to die.

The Muncie city directory of 1893 contains an advertisement for one hospital which was operated privately in the homes of Dr. W. Dee and E.A. Whitney. Their ad assured potential clients that, "all patients are given personal observation and care day and night, if necessary." There were no other hospitals available.

Compounding the stigma, the patients might have felt, the board of health quietly ruled that all patients who could afford frequent visits from a physician and other necessary expenditures would be allowed to remain in their homes, although this decision was reversed a few weeks later. The stigma remains and the Trestles weren't the only family to violently object to their son being taken to the hospital.

Frank Clevenger also waved a shotgun at ambulance drivers who arrived to hospitalize his elderly father. The drivers left without the senior Mr. Clevenger, who, sadly, died a few days later. William Tweedy was charged for inciting a riot for leading a crowd and stoning quarantine guards who took a member of the Campbell family to the hospital. The outcome of his case is unknown.

As already mentioned, rumors of negligence were rampant. The papers reported that one patient, delirious and rendered blind by swellings around his eyes, was so neglected by the nurses that he left his bed in search of a glass of water and fell through an open window. The official record states this person died of smallpox, but the former nurse who reported the accident claimed that the patient died from the fall.

The hospital superintendent denied this report, staying instead that the patient had merely ran away from his caretaker in a delirious fit; the patient got out of the building but had been returned unharmed. The former nurse who said otherwise, the superintendent reported, had himself been dismissed for incompetence. Regardless of which of these people was telling the truth, the hospital doesn't appear to advantage either version. In addition to hospital quarantine, the city health authorities enforced compulsory vaccination.

Lately, historians and journalists have returned to smallpox outbreaks for lessons applicable to contemporary controversies around vaccination.

For a long time, historians had dismissed anti-vaccination activists as foolish people who were on

the wrong side of history. However, as historians such as James Colgrove and Elena Conis have pointed out, when anti-vaccination are looked at closely, we can gain valuable insights over the struggles of local or state government's power and the public's trust in medical or scientific authorities.

In the case of Muncie, a rapidly growing, small city, both these aspects are combined. As I mentioned already, the position of health officer was pretty new, and Jackson himself had never had to manage a smallpox outbreak. And, as became plain to the citizens of Muncie, members of the health profession were not united in either their understanding of the disease or the necessity of vaccination.

The anti-vaccination movement of the 19<sup>th</sup> century was fueled by citizens who resisted state authority to compel them to take a vaccine. Their arguments against vaccination included a range of moral and practical arguments.

For one thing, smallpox vaccine was, of course, cultivated in cows. Anti-vivisectionists, which was a 19<sup>th</sup> century movement that objected to experimenting on live animals, argued that the process of cultivation was a form of animal cruelty. Others insisted that the injection, a foreign matter into the human body, was unnatural and to make compulsory was "a crime in the nature of rape," as one anti-vaccination pamphlet phrased it.

Overall, anti-vaccination is subjected to the idea that any government had the right to compel a citizen to submit to the procedure. Furthermore, the production of vaccination material, prior to

the 1890s, was little regulated. The lymph material might not have been stored properly, and thus contaminated, or it might not have been effective. The instrument used to introduce the material might itself not have been properly sterilized, introducing a second infection. For example, of the thirteen thousand Muncie residents vaccinated during the epidemic, one person contracted tetanus and died as a result.

Finally, even when the process went smoothly, vaccination was an unpleasant procedure. The vaccinator took a needle laden with vaccine lymph and scratched a wound onto the recipient's arm. If the vaccine took, a blister, much like a smallpox pustule, would form. The patient had to carefully protect this wound for some days, until it healed, to prevent further injury or other infection. The area around the vaccine site usually became sore and swollen and added inconvenience.

Doctors who documented the Muncie epidemic noted that vaccination had largely been neglected in the area since the last outbreak in 1876. Smallpox vaccination needed to be readministered every ten years or so in order to remain effective. For this reason, the health authorities decided to require that all citizens, regardless of whether or not they had been vaccinated in the past, be updated. For physicians, to go through the infected district door to door and vaccinate all residents there.

After finishing the infected district, they then went door to door throughout the city. All of these physicians were members of the county medical society and were therefore members of the regular physicians. These physicians, in their rounds, were often met with resistance. At one home, a woman

opened the door and refused to allow them to enter her home. The entire family had already had smallpox, she asserted, but the authorities had not been notified.

Vaccination was therefore unnecessary, and she was not about to let them in to inspect her family and verify her statements. This attitude, health officers noted, was not unusual. As mentioned, the city was successful in vaccinating thirteen thousand out of a population of almost twenty thousand--that's a rate of sixty five percent. Most of the opposition to vaccination among Muncie residents seems to have stemmed from a general aversion to government authority and a belief in personal liberty.

Few residents left personal journals or wrote to the papers to clearly outline their reasons for resisting vaccination, but we can glean some clues from the local press. There were a few letters sent to Muncie papers explaining why vaccination should be avoided. A couple of these affirm the belief that smallpox was one of the zymotic diseases, meaning it originated in unclean conditions. All that was needed, therefore, was a general city clean up and vaccination was unnecessary.

One of the few men to sign his name to such a letter was William Lynn, who worked as a store clerk. In Lynn's opinion it was a little too convenient that the Delaware County Medical Society, which was the organization for local regular physicians, should support compulsory vaccination, and that it also advocated for some of its members to be employed by the city and paid well to do the job. He and others suspected that the smallpox epidemic had been invented to generate

demand for vaccination and, thereby, make money for the vaccinating physicians.

Despite overtly stated opinions and covert methods of evading the authorities, hospitalization and vaccination became more efficient and the number of new cases began to decline steadily, starting in mid-October. This, however, compounded the sense that new powers given to health authorities were unwarranted. This is a common theme in a lot of epidemics that public health authorities have noted. Once they're doing their job properly, it doesn't seem like it's necessary.

By the end of the month, interviews with local residents indicate a general weariness with the state of things. Twenty-four of twenty-eight businessmen who had previously supported the health officer, were now in favor of immediately opening all schools, churches, and theaters. Some even claimed the quarantine had been a farce from the beginning and that rumors of smallpox had been propagated by Muncie's rival towns in the gas belt to diminish its business. Ultimately, the board of health set a target date of November 4<sup>th</sup> for lifting the quarantine, providing no more than three new cases occurred.

This target was met, and the night of Saturday, November 4<sup>th</sup> was marked with bonfires and gatherings of over five thousand residents in the streets, celebrating the end of quarantine. Not long after, in desperate need of a break, Jackson resigned as city health officer. The schools were reopened on November 6<sup>th</sup>, and all students were required to present a vaccination certificate in order to be admitted.

For the anti-vaccination movement, compulsory vaccination of children was an especially thorny issue. Children were, of course, perceived as innocent and subjecting them to a potentially dangerous operation seemed unnecessarily cruel to some. Dr. Bunch himself had three school aged children whom he sent back to school with vaccination certificates that he signed.

However, when the Bunch children arrived, they were told that their certificates were not valid and were sent back home. It was discovered that other children with certificates signed by Bunch and by a list of like-minded physicians had also been turned away. The school superintendent affirmed that this had been done on orders from Dr. Jackson. Jackson quickly rescinded the order to avoid further public outcry, as some parents were threatening to sue. Whether Bunch falsified his kid's vaccination records is unclear, however, we do know that in late November, he convened a meeting of Muncie residents and doctors who were opposed to compulsory vaccination "or other unjust restrictions of the rights of the people."

He likewise became prominent in state-wide anti-vaccination efforts, and in 1894, testified in a case in Terre Haute where an unvaccinated child had been excluded from school attendance. The child's father had sued the school board, arguing that there was not a smallpox outbreak at the time and that there was no state-wide compulsory vaccination order. The defense in this case also called on experts from Muncie, including Dr. Cowing and Leech, who argued for the necessity of compulsory vaccination to prevent smallpox.

The school board in Terra Haute prevailed in the case, and vaccination was upheld there. As Bunch became known as an opponent of compulsory vaccination, Muncie's health officers published reports of their own, outlining lessons learned in containing an epidemic.

This too was emblematic of the Progressive Era, as they provided statistics and anecdotal evidence to support their claims that home-based quarantine was ineffective, and that vaccination should be enforced. Their case proved that even when vaccination didn't prevent the disease, it lessened its severity and prevented death. In twenty-two individuals who consented to receive vaccinations so that they could attend to friends and relatives who were isolated in the smallpox hospital, not a single one contracted the disease. These reports were published by the Indiana State Board of Health, and the collection was bound and printed as "Epidemic of Smallpox in Muncie," in 1893.

Smallpox is a scourge of the past, yet many of the problems exposed by the Muncie epidemic have echoed through modern public health crises. Lessons recorded by the doctors in "Epidemic of Smallpox in Muncie," include the following recommendations. The need for swift, decisive action, provision of the best, most comfortable care for the sick, and unity of purpose.

As Dr. Cowing wrote, "there must be a mutual and intimate bond of support between health officials, physicians, and citizens." Yet, the circumstances under which the epidemic occurred were equally important. There was a simmering tension between the established residents and the newcomers flocking to the district. City government was

evolving to take more direct responsibility over the health and well-being of its citizens, but not everyone was convinced that these new powers were in the public's interest. The regular medical profession itself was struggling to establish a position of trust and authority for itself. For Muncie citizens who lived through this epidemic, these issues remained unresolved.

### **Q+A**

[segue from lecture]

CHRISTOPHER BRICK: And if you're considering sticking around for the Q+A I'd encourage you to do so because there was a lot of process that went into this. The first time that Kelly and I sat down to have a conversation for the Q+A the audio got corrupted and so we had to do it again. Kelly was so accommodating about that. I want to thank her for that. Kariann Yokota joins me as well. Enjoy.

[beginning of group conversation]

CHRISTOPHER BRICK: Kelly Hacker Jones, welcome to the podcast!

KELLY HACKER JONES: Hi, thank you for having me, Chris.

CHRISTOPHER BRICK: It's wonderful to have you here and it's wonderful as well for me to welcome back once more, the illustrious chair of the Marketing and Communications Committee, Karianne Yokota. Karianne Yokota is with us today. Welcome Madam Chair.

KARIANNE YOKOTA: Thank you, it's always great to be here. I look forward to these sessions and I am really looking forward to our discussion today, Chris, so thank you.

CHRISTOPHER BRICK: I am too -- and if you'll just permit me one moment, Madam Chair, we got some fan mail. We got some fan mail.

KARIANNE YOKOTA: That's great.

CHRISTOPHER BRICK: I got a direct message. I got a direct message on Twitter, someone who's been listening to the first couple of episodes which are out there now. And they're a great fan of your work in particular.

KARIANNE YOKOTA: Oh really!

CHRISTOPHER BRICK: Yes, really. My understanding is that your - was this your first book, *Unbecoming British? How America Became a Post-Revolutionary [sic] - a Post-Colonial Nation*.

KARIANNE YOKOTA: Yes, it was so, but for the person who sent that. Thank you very much. I appreciate it. I'm I'm very, very flattered that you sent that. Yep, so that was my first book. Right now -- when the lockdown happened across the globe, I was in the midst of a fellowship at Oxford University. I was the Fowler-Hamilton fellow at Christchurch College there, and also the senior Research Fellow at the Rothermere American Institute. So for those of us who are working on American history, they should check it out. I'm still a visiting fellow there and I'm working on a new book called "Pacific Overtures," and I'm looking at how America's rise as a global power in the 19th century is linked to

its encroachment on the Pacific and Asia. And again, I'm going to revisit my interest in material culture and what material objects and what visual material evidence can add to our historical research, so...

CHRISTOPHER BRICK: So, this is what you've been working on in quarantine. I took the yeah the sense of of the tweet to be like: "You know, what's she up to?"

KARIANNE YOKOTA: "Where is she? What's she doing?" Well, yeah, and I mean, because of what's been going on in the United States? I've also been very, very engaged in a lot of lectures and workshops around my other research interests in 21<sup>st</sup>-century race relations, in particular African American and Asian American relations in the US. So I've been doing a lot of guest talks and doing workshops talking to even K-through-12 audiences about how we can use the past to try to address the current issues that we all facing around race and racism. So those are my those are my things.

CHRISTOPHER BRICK: Well, in that case, then I should thank you not just for your service to the committee, but for the research and the work that you're doing right now. Because that couldn't be more timely and I'm glad to hear that there is interest in that you're getting invited to give talks and things -- cause normally you're right -- I mean your day job, your teaching gig -- you're typically at the University of Colorado, Denver, most of the time, right?

KARIANNE YOKOTA: That's right, yeah. And our campus went online, like so many different campuses around the globe went. We were remote and so I'm still

there and we're all just able to now rethink what life -- professional life, is like, and I think our speaker will talk about that a little bit today about what she's been doing. But yeah, I'm in those spaces, and in those places and going to seminars around the globe, which is really nice and I hope our listeners will know that we're there with them, and that we've learned so much through the series of talks and lectures and podcasts that we've been recording over the course of these few months, Chris.

CHRISTOPHER BRICK: Yeah and thank you for to our listener, by the way, for you know, sending me that message. I mean, questions like that are always welcome, inquiries. If there's content or questions you want me to be asking that, I'm not -- I'm sure there -- those are good things to let me know Kelly.

So Kelly, hi! Welcome and thank you for the talk you contributed.

I have been to Indiana myself. I've been to Muncie, Indiana myself very briefly, so you know. It looms so large in the way that space is imagined in that moment in American history, because of this study that the Lynds do, which takes as its baseline 1890 -- so just before the time that that your talk opens in this 1893 moment.

And when it starts - speaking of openings -- when it starts there is a really violent encounter -- astonishing -- between public health authorities and a family under quarantine, right? And one person shoots the other. So could you talk about that a little bit more? I mean, was this common?

KELLY HACKER JONES: The threat of violence was kind of in the air, right? So this episode with the Trestles -- and you know that story that I tell at the beginning, I will admit is kind of reconstructed from newspaper and from census statistics about that family and from the geography of Muncie. And so the Trestle, where he shoots at the deputy, that is the first such violent encounter that we see in Muncie, but it's not the last.

There, a few weeks later, as I recall, I found in my research there was another instance where it was a neighbor in that general area of the South side of Muncie, likewise pulled a gun and threatened another one of the quarantine officers.

Shots were not fired that time and there were other multiple instances of rocks being thrown at the wagons, and you know that it's sort of that general idea that we are going to counter.

We're going to confront what we perceive as state violence or, you know, local public health, authority, violence, forcible removal, or, you know, compulsory vaccination with physical violence, and I think this comes from, you know.

This comes from that sort of spirit of pioneer mentality that the lens talked about in the *Middletown* study, you know, and they're using that 1890 baseline and they describe a community that.

You know has this sense of rugged individualism that you know it's it's up to me and this is not this is a community that 100% would have been used to using violence as a way to protect their individual rights.

And so when you view it in that lens, it's perhaps not so surprising that Mr. Trissell sees, you know his 12 year old son.

About to be taken away to a hospital and he sees it as a legitimate use of a firearm - to defend against that. So that's the kind of sense that I, the context, that I try to take that that episode in.

CHRISTOPHER BRICK: Right, Mr Trissel is Charlie's father?

KELLY HACKER JONES: Correct.

CHRISTOPHER BRICK: And Charlie's family does not want him to go to the hospital. What I guess the middle-class folks in Muncie called a "pest house," which sounds awful. And the public health authorities show up with police officers to remove Charlie to "the pest house?"

KELLY HACKER JONES: Correct, so there would have been -- it was a mixture of men who had been recently appointed to be the quarantine police. So they're the guys who are literally on the ground, kind of keeping an eye on the neighborhood. It's not actually very clear to me, you know, to what extent they are hired by the Common Council. They're not part of the Police Department, but they definitely have this sense of: "What's our authority here?" You know? So in order to kind of reinforce that they bring in recognized law enforcement.

And so yeah, the sight of, you know, literally an ambulance with a police officer sitting on it. That

definitely, you know, brings up questions of policing and of the state.

CHRISTOPHER BRICK: Yeah, I just said -- did anything happen to Mr. Trissel for the shooting?

KELLY HACKER JONES: As far as I found, no. I remember when I was doing the research for this back in 2007. I even went to the county clerk's office and like asked them about court records and police records and they took me to this like old strip mall site. And there was nothing in there, but like you know, old property-waiver applications and things of that. So I cannot. I don't believe any of the legal records from this era still exist, or if they do, they're hidden somewhere, I don't know about. But as far as I know there was never anything in the newspapers about, you know R.F. Trissel was never charged with anything so far as I know.

There were other instances of people being arrested or at least allegedly arrested in the newspapers for violating quarantine, but I've never found I've never located any legal documents or any sort of, you know, here's the arrest reports for this week.

CHRISTOPHER BRICK: It's an incredible anecdote, I mean, and you know, I could ask a few more questions, but I want to bring in our illustrious chair because I know she has some as well.

KARIANNE YOKOTA: Well and yeah, I have thank you, Chris. I have questions about this incident as well. I think the listeners will have lots to ask. I was wondering if you could tell us a bit more about why he was so hesitant to have his son taken there and the social and cultural implications and

definitions of what it meant to be in a hospital? I thought that was one of the most interesting parts of the lecture that you were talking about, that the hospitals weren't then what they are now.

KELLY HACKER JONES: Yeah, and for me you know doing that research, you know you really do have to put yourself in that 19th century mindset, because to our 21st century audience, hospitals are where we have the latest technology and the best standards of care.

And you know you're if you're in the hospital, you're going to be OK. But that's not at all the mentality, even as you're starting to see changes in hospital-based care at this time, what most Americans on, you know, the former "frontier" in the 1890s are going to think of hospitals are of that literally the pesthouse mentality, right?

That these you know, hospitals begin as you know, in early American history, as sites of quarantine, literally people with communicable diseases that we don't want circulating in the neighborhood. We're going to round them up, put them in this place. And you know, Charles Rosenberg's work is the seminal early work on hospitals. But that idea, that a hospital is where you go when you don't have friends, when you don't have means, when you don't have the money to be properly cared for at home. So be put in a hospital that's like a social signaling that "we are working class" -- not even that we're "working class." "We are below working class" and the Trissels are definitely, you know, a solidly working class family. And so there is I would, I would posit there is a very real social anxiety about keeping hold of their -- of the position they had attained and not having their son taken away to

a place that is both socially stigmatized, but also that might physically be dangerous because they're, you know, where all these terrible rumors circulating as well about what's going on at the hospital.

And I talk about that, you know, in the lecture how nurses are allegedly drunk and people are being neglected. It's impossible for me to say to what extent those rumors are true, but that's that's what's in the public dialogue, right? And that's what they're going to be escaped. But nobody wants their 12 year old son subject to those conditions.

KARIANNE YOKOTA: Well, and what struck me is that it seems to have, it's connected to the rise of these other institutions of social control. The penitentiary, you know, the poor house. We had a lecture that talked about the poor house, so I think it's all part of the same kind of structure.

And it's also interesting the contrast between today, where people are worried that they won't have a place in the hospital - that, you know, you're trying to get entry into this safe space. And in the time you're talking about, it's the opposite. So I thought that was interesting. That was an interesting contrast.

KELLY HACKER JONES: Certainly.

CHRISTOPHER BRICK: Yeah, Kariann's question about these institutions -- these professionalized settings that are acquiring power in this moment. It seems like it's something that that circles back to the question of vaccines versus anti-vaccines. It's something that has recurred a number of times in this this series as well, particularly with

respect to smallpox. This is 1893. Right, it's very late, right? And the second episode of this series is a smallpox episode, and it is several hundred years earlier than when your talk takes place. One thing that recurs, though it seems to recur across all of that time, is that the skepticism about vaccination or its embrace, its acceptance. Those disjunctions always seem to track some kind of discrepancy in power. Sometimes it's power across lines of race. Sometimes it's power across lines of class. And sometimes it's power across lines of professional setting, education, or access to truthful information or the kinds of resources that empower one set of choices and not another.

So there's an anti-vax versus vax line in your talk as well. I just wanted to invite you to comment a bit more, share a bit more about what disequilibria of power does this track in Muncie, IN in 1893 and what is it? What does that say about the broader context your talk is set within?

KELLY HACKER JONES: So I think. There's two different lines of power in question at Muncie, and one we can get at better thanks to the sources, and one we cannot.

The one that I can say less to has to do with social power and with class discrepancies. Because you have, you know these random observations here and there in the historical record.

I think it was Hugh Cowing, the county health officer who referred to that South side of Muncie as a district rife with overpopulation and anti-vaccination sentiment. But that's him talking about others. We don't know what they would say themselves. We know from the geography of Muncie --

from the settlement that those would have been, you know, newcomers in the city.

They would have been the people involved in the more precarious industrial occupations. Many of them would have been impoverished, and so we can sort of extrapolate from that position, that their rejection of compulsory vaccination is a rejection of local and state power, right? It's saying, "I have the right to choose what happens to my body... I don't understand," or "I don't buy," to use common parlance, "I don't accept that vaccination is right for me."

There could be, I don't know whether that stems from a sense of danger about vaccine, a fear of the side effects which were very real at the time. I mean there were, you know, plenty of instances prior to this episode, there was actually that one case in Muncie where somebody did get tetanus as a result of their smallpox vaccination.

But even just having a very sore -- the scar that you got when you got vaccinated, you had to take careful care of it. It made your arm very sore, so it's going to be kind of difficult to complete daily tasks. So for those individuals I would say that it's, you know, kind of just that general generalized sense of pushback.

But the other place that you see networks of power and disparities about you know? Or maybe a place where you have a power, a conflict over power erupting comes from the Muncie medical profession, right, where you've got Doctor Bunch and the eclectic physicians you know -- not the mainstream, not the Delaware County Society, not the American Medical Association physicians, but they -- those

are the organizing forces behind an actual anti-vaccinationists club/group in the days after that epidemic is over.

And so that is, you know, for them to to say that they as professional men, as men who are doctors but not part of that medical establishment represented by Frank Jackson and the regular physicians, as they're sometimes referred to -- that is, creating, you know, that's pushing back and that's creating professional space for themselves and for their own ideas about health care and the body and who gets to choose. Or who gets to decide what the appropriate response to a public health threat is.

So I think yeah, to work it back to your question, that that's where I see the two sort of different types of power disparities: one between professional societies, and between you know the working class or people of lower social position.

CHRISTOPHER BRICK: Well, and thank you for bringing in these separate fields of medical practice, these different communities of medical practitioners, because it seems to me -- I guess still in 1893 there's enough separation between these different communities of medical doctors that there are some who don't buy into germ theory just yet, right?

KELLY HACKER JONES: Yeah.

CHRISTOPHER BRICK: I mean, there's there, there's also germ skepticism, not just vaccine skepticism, and that's active within the medical, the professional medical community.

KELLY HACKER JONES: Yeah, even and even within so you have those four, we call them the schools in medicine. Even within that regular community - I call them the AMA doctors, the professionals that will go on to found the American Medical Association. Even within their ranks in the Indiana Medical Society you find vaccine skeptics as late as that 1889 survey.

So what I like about this episode too is that it really erodes that sort of myth of a monolithic medical community, right? And that's something that you know to an extent we see today where you have multiple people who can claim medical authority and access to the scientific knowledge that it takes to understand how vaccines evolve or how viruses evolve and how vaccines are, you know, judged. And they're all still making their own separate judgments, you have a range of it's difficult, I guess, to know what experts to listen to is what it comes down to there.

CHRISTOPHER BRICK: The AMA doctors, as you called them, which is a great way to think about it. Thank you. That's wonderful. They just the reason, I guess. I guess what I'm thinking of is: They become the AMA doctors because they're able to consolidate their own authority over the practice of medicine and over professionalized medicine in this moment, and is that connected to their embrace both of germ theory and of vaccine technology? Or do those two relationships empower their ability to step forward as the leading medical authorities? Beyond those other communities of practitioners?

KELLY HACKER JONES: Right. Yes, but it's sort of the cart before the horse, so we should clarify that the American Medical Association is founded in

1849 before germ theory. So it is a moment where dominant medical theory is about bloodletting. You know, think of all the horrible associations we have with 19<sup>th</sup>-century medicine. You know, you're using leeches, you're bloodletting, and the American Medical Association comes out of that Jacksonian moment, where you're starting to have these splinter groups like the homeopaths, like the eclectics coming off. So the American Medical Association exists to represent the interests of doctors, and it is very concerned with continuing medical education.

And the AMA is the first professional society, professional medical society in the United States to embrace germ theory after - and so, that's you know less than 10 years before the Muncie epidemic. They are then able to sort of claim that mantle of scientific authority, and we are on track with the cutting-edge medical science of the day and so that's a much newer move for them when this episode happens in 1893, but it's certainly something that they are going to use to emphasize their authority at that time.

KARIANNE YOKOTA: I always want to introduce the global into our discussions because I worked a little bit on -- I had a chapter on transatlantic medical communities in the mid-18th century. And in the period where I was studying, the American doctors who wanted to be the -- I guess the earlier versions of the what you're calling the AMA doctors -- those who wanted to have some kind of medical authority would often go to places like Edinburgh or Paris to train.

And so I'm thinking I wanted to ask: Where is the global in the medical communities that you study

here? Or are they replicating this kind of hierarchy with the East Coast doctors like the Philadelphia Medical Establishment? So how? What is the geography that we're dealing with in in your world? Or the world that you're showing us in your lecture?

KELLY HACKER JONES: That's an excellent question. Within the Muncie medical community they there is very much an adherence to that East Coast Medical establishment, as far as I can tell, and there have been like multiple of these portrait and biographical records of Delaware County, so we have access to at least the biographies that these physicians like to position of themselves.

But even you know, going through that there were not any doctors from Muncie personally, who did study in Europe at that time, although you're absolutely correct, that was, you know, for decades, the route to being a professor to being a fully realized, accomplished doctor in the US was to go to Berlin, or Paris or Edinburgh and study there, but there is very much replication of journal articles that are published overseas, the Delaware County Medical Society you know absolutely takes up New York, Philadelphia as as models for how they think about health and the body.

Now, the global comes in through the germs in this section in this period and that's, you know, the constant question is always that smallpox has to have come from somewhere else, right? Like this isn't something that's endemic to our community, it's come from elsewhere and probably, you know it did. There's rail lines connecting Muncie, but the global also is on the the minds of people in Indiana in 1893.

There was worry about, you know at the time what they called Asiatic cholera, which is just cholera but the state again, with the you know we have to blame somebody else in our terminology, but the State Assembly in 1892, it appropriated a new a pandemic fund because everybody knows Chicago is going to host the World Fair in 1893.

All of those rail lines coming from the East Coast go through northern Indiana, where you know all these travelers going to bring cholera to northern Indiana, and so there was a pandemic fund created, never, that that pandemic never materialized. So Muncie the reason that there was state funds for, you know smallpox vaccination to a hospital in Muncie was because the state had already set aside funds for a completely different disease. But I always, you know at the-it's always sort of fascinated me too the idea that we were, we were preparing for a pandemic, just it wasn't the one, this is not the pandemic you're looking for. Sorry.

CHRISTOPHER BRICK: Could I ask? I'm sorry, I just want to make sure I'm following this correctly because that's amazing. So there was public investment in public health infrastructure uh created by the state of Indiana to mitigate the expected impact of influx from elsewhere speak because of the 1893, the pending 1893 World Fair in Chicago.

KELLY HACKER JONES: Absolutely, they're-they're anticipating. There had been newer outbreaks of cholera global in spots across the globe. There was an expected rush of travelers to Chicago, so they're they-they thought we need to be ready for a public health threat from this.

CHRISTOPHER BRICK: Wow, yeah, well and-and the that world fair in particular has such a foothold in in literary imagination lately because of devil in the White City and how that was a huge bestseller, the Eric Larson novel. I guess it's not a novel, it's a it's sort of non-fiction narrative uhm? You are a Hoosier, right?

KELLY HACKER JONES: Yes, correct, guilty.

CHRISTOPHER BRICK: So, how does this local story inform your own sense of self and inform your, I mean you you were studying disease before this quarantine situation of 2020-21 emerged. How is it shaped the questions you're asking right now?

KELLY HACKER JONES: Yeah, um. I you know I kind of have to put myself back the 13 years ago that I was working on this, but, you know, I grew up in small town, Indiana, and you know the Midwest is getting attention again and-and it comes through in the Middletown in the Lens study this rugged individualism right, this you know. We have an absolute right to self-determination, and for me kind of reading it, you know I, in a way like I didn't accept the judgments that a lot of-of Muncietonians who rejected um vaccination or rejected quarantine, I didn't exactly accept their-their judgement, but I could empathize, right? I could. I was like, "Okay, I grew up with this sort of that-

CHRISTOPHER BRICK: This like libertarian type-

KELLY HACKER JONES: Yeah.

CHRISTOPHER BRICK: -way, right?

KELLY HACKER JONES: Yeah. It's a, it's a gut resistance to authority. It's a-it's a-a confidence in your own ability to-to weigh options to understand risk and determine for yourself what that risk is. And you know this case when this the current pandemic began over a year ago, I had, you know, finished this project 2008.

It's my master's thesis, put it away, but it almost like immediately came back to me because what I saw people bringing in back, you know, a year ago was exactly this, right? Like, well, who are, who's the government to tell us due to social distance or I don't believe I don't believe this is really a threat. I haven't seen anybody in my community come down with this disease and that's you know that's me sort of recalling criticisms that I heard at the time.

And I started thinking back to the people of Muncie and the reasons that they had for skepticism of vaccinations, skepticism of public health authorities, and so I kind of at least, you know, began reading local responses to the pandemic through that lens and I guess for me how-I mean, this is sort of shaped my intellectual trajectory. I'm-I've, you know, working on different projects. Since then my-my PhD dissertation was on actually the use of acupuncture in the 20th century United States, and there again I saw these same questions coming up: who has the right to tell me that acupuncture works or not? I think it works. It helps my pain um and there you go and so I realize, yeah, that's-that's what I'm always looking to history for answers.

Whether it's you know why people just, you know, think about health, the way they do. I've also been

getting more interested in the concept of risk and how you know how we think about public health risk, how we think about individual risk and so that and that's kind of a-a new way that my head's been going lately.

CHRISTOPHER BRICK: How would you compare the handling of this smallpox epidemic you described to other cities in other places: New Orleans, Philadelphia, New York?

KELLY HACKER JONES: In a lot of respects, um, it's the same but different. Places like Milwaukee, Chicago, New York, you know, they-they're very used to um repeated epidemics, especially in New York, but New York, has a much longer public health establishment. I think where things-where the public health authorities in Muncie are looking, they're-they're cognizant of the strategies that are used in Philadelphia, in New York. They know that if you know anytime epidemic disease comes up in those places, it usually means um isolation of the patient.

So in larger cities where there is a better established record of public health authority, they don't, for example, recognize domiciliary quarantine, like they do in Muncie. I think that that's initial moment of trying to quarantine people in their own houses was the public health the Muncie public health authorities' attempt to recognize local conditions and recognize that working class middle class families are not going to accept quarantine in-in a hospital and then they instantly all turn around and realize like that doesn't work-that doesn't work, and they publish these pamphlets for the for the State Medical society and they put it out there like,

"Hey, you know you can't even mess around with trying to let people quarantine at home. You have to send them to the hospital."

That was our biggest mistake in this pandemic in this particular epidemic, so I'd say that's the biggest divergent there.

CHRISTOPHER BRICK: Thank you.

KARIANNE YOKOTA: Kelly, we had a chance to talk a little bit before the recording started about your PhD work on what Eastern medicine and in particular acupuncture and I, going back to the global, I just wanted to hit on a different aspect of global themes in your topic, which is how-how do the doctors that you were studying integrate kind of, I guess global or transnational advances in medicine?

Of course, in the history of vaccination we were always thinking about Doctor Jenner who's overseas. You know how how-do they see that as foreign knowledge? Is it seen as universal knowledge and how does that differ from more homoeopathic knowledge or eastern knowledge? We talked in another lecture about the fact that in the Chinese in China they had been practicing inoculation, or you know, really understanding that technology or that much earlier than the West and how you know what can you tell us a little bit about that, and whether they see it as foreign knowledge or is-is medical knowledge universal at this point for your doctors in Indiana?

KELLY HACKER JONES: As far as like knowledge is evaluated, it's it's all about that sort of Western European based knowledge. I unfortunately don't

have a, you know a whole lot of examples of people from non-European countries in Muncie at this time.

CHRISTOPHER BRICK: Did they still look to as Europe as the-

KARIANNE YOKOTA: -Arbitrary guard, the Royal Society, like in my period, you know everybody wanted to be acknowledged by the Royal Society and they saw American doctors, even Americans, who would consider themselves white elite doctors, as people out on the field gathering primary research right rather than fellow theorists. And so then I saw it replicated between East Coast centers like Philadelphia and New York. Maybe Boston vis-a-vis, the new western frontier, Kentucky. And I would say, Indiana, Ohio.

You know that the doctors working on the frontier, I-I know that the first hysterectomy I-I-I-I've read a medical article about that that was in Kentucky I believe. But the individual was angry because the Royal Society didn't recognize that because it was so far afield. Maybe if you're in a Philadelphia hospital, you would get credit, but not if you're out on the so-called Frontier.

So that's where I was kind of interested because you've studied Western or Eastern medicine, and you know, how we-how do-how does medical knowledge advance or how is it shared across the globe?

KELLY HACKER JONES: Yeah, I love that you brought up the Royal Society too because now I have a clear memory doing my research in the old newspapers. And of course, this is an era where newspapers just, they grab stuff off the wire, they reprint things, but I remember at least one, if not two articles on

the efficacy of vaccination that were taglines, you know, from the Royal Society in London.

Like even in Muncie, you know this newspaper is publishing articles that might have been put out even years before, but still, you know, that's- that's who we're going to look to and that's who we're going to put in our-in our public newspapers and convince everyday people, look if the Royal Society in London thinks this is right, then you guys must think it's right too, and I think there too-that's where that might be another layer in which that anti-establishment sort of popular discourse pushes back because I know, you know-I know what the average Hoosier in 1980 was going to say. Probably the same thing, you know, probably similar to what they would have said in 1890, and that's "who does this guy in London know about my life?"

CHRISTOPHER BRICK: All right, so Kelly, I have just one more question before we wrap up and I wanted to-you had some wonderful terminology that you gave us, quotations about what people were describing Muncie to be at the time in the 1890s. Some people are calling it the Eldorado of the West, some people are calling it the home of the Industrial Genie, and in other iterations it's called Magic Town. So, why was it magic in 1890s era Muncie, Indiana.

KELLY HACKER JONES: Well, magic in this sense refers to, of course, the gas boom and it's going to generate fortunes overnight, right? For people who can locate there and build factories and generate this wealth. But I think you know, magic is-magic is such a big word that encapsulates imagination and magic encapsulates possibility.

It's-It's not just the promise of wealth, right? It's the promise of status. It's the promise of stability, and I think that Muncie becomes something out of, you know, from a sleepy county seat to being what they think is going to be the next Buffalo, NY or the next big industrial area. It's a way it's a place to start over.

CHRISTOPHER BRICK: Sounds like there's a lot of technological optimism. Economic optimism about the promise of the place is that, yeah?

KELLY HACKER JONES: Absolutely, that's yes. It's yeah, it's about promise, and I think that too-that's why this-the reaction to the smallpox epidemic is so visceral, right? Because we've been promised magic, we've been promised prosperity and now there's an epidemic that's going to shut down the city. And you know, we might have to close factories. And that's-we're reacting against that uhm?

CHRISTOPHER BRICK: All right, well, you know. I think it's something all of us can aspire to because no one called the intervals pod Magic town just yet. But maybe after this episode they will because this conversation has been a little magical in its own special way, so I want to thank you for the talk you contributed. I want to thank you for the research you're doing, the work you're doing right now. Madam Chair, I want to thank you as always, for making-making this conversation a little bit more magical as well as you always do.

KARIANNE YOKOTA: Thank you, you're always so kind. It's always great to be here thanks to you for hosting Kelly for providing the lecture and all of our listeners for tuning in again.

CHRISTOPHER BRICK: It's Kelly Hacker Jones everyone.

### **Conclusion**

CHRISTOPHER BRICK: And that's a wrap. Please join us again next time when Jacob Steere-Williams will bring us into the 20<sup>th</sup> century with, "The Obsession to Disinfect, and Why it Unequally Impacts Our Communities." Jacob was such a pro to deal with and his work is so polished and so brilliant and he taught me so much so I really do hope you'll join us. And we'll catch you then.