Appendix A. Complete Simulation Narrative

It is now December 2072. In the early 2040s, an antimicrobial resistant bacterium called *pseudomonas genesis* caused a health crisis that started in the U.S. and rapidly spread across the world. Widely known as P-Gen and related to the *pseudomonas aeruginosa* that frightened the CDC in the early years of the twenty-first century, the new bacterium caused inflammation of bodily organs followed by rapid tissue breakdown, resulting in graphic and painful death.

The Republican government declared a public health emergency in May 2041, as soon as they realized how fast the disease was spreading. Quarantines and patient isolation procedures were put in place. Resources were diverted to epidemiology labs and drug development. Nevertheless, between May 2041 and February 2042, 40,000 Americans died from P-Gen.

In February 2042, a team of epidemiologists at CalTech came up with a new antibiotic called pseudogenemicin, and the world hoped the crisis was over. By 2045, however, the bacteria had mutated and pseudogenemicin was no longer effective. Another team of researchers at MIT produced an antibiotic with limited efficacy in 2047, though they warned that it was only a matter of time before the new drug stopped working due to further mutation. In 2048, a group of chemists and material scientists at Clarkson developed a drug that could make the P-Gen bacteria temporarily dormant, but not kill it. Devastating clinical trials showed fatal side effects, and the drug was never marketed, though desperate patients were sometimes willing to pay tens of thousands of dollars for it on the black market.

In this process, the government announced that it was diverting vast amounts of funding to genomics, epidemiology, and drug development and delivery systems. Scientists, engineers, and physicians became a privileged class – even though rumors circulated that the P-Gen virus hadn't originated naturally at all, but had been engineered as part of a military contract in KIBST (Harvard's Kavli Institute for Bionano Science and Technology), and had been released into the population accidentally. To keep the scientists safe and create conditions conducive to round-the-clock experimentation, the government set up walled compounds for scientists and their families to live and work. These compounds were quarantined and provided with state of the art equipment, along with plentiful food, comfortable housing, and all the trappings of a wealthy suburban lifestyle.

All the while, the infrastructure of the country slowly collapsed. The U.S. government closed all national borders in 2044, hoping to limit the spread of disease. Canada, the U.K., and most European countries followed. As imports and exports ground to a halt, the U.S. was faced with shortages, most dramatically in oil. The economy fell apart. Prosperous communities turned into slums, with crime plaguing a nation already ravaged by disease.

By the 2060s, resentment against the "scientific class" had grown. The death toll passed three million in 2060. The quarantine created by the compounds insulated scientists and engineers from the spread of disease, crime, and poverty, but they seemed no closer to solving the health crisis than the researchers of the 2040s had been. A newly-formed political party called the Health and Freedom Party capitalized on this resentment. Initially a loose coalition of activists without a coherent political platform, the Health and Freedom Party used widespread

anger against the status quo to undermine the two-party system that had dominated U.S. history. They took power in the elections of November 2068.

The Health and Freedom government incited widespread violence against scientists. The President held the scientific class responsible for the failure to stop the disease. Presidential speeches referred to scientists as parasites and described them as unworthy of the protections previously afforded to them under Republican policies. In January of 2069, a mob broke into a science compound in Burlington, Vermont, destroying labs and homes. No one was prosecuted. In the ensuing months, mobs attacked compounds across the northeast, beating up scientists and their families. By December of 2069, 120 people had been killed by mob violence. These seemed at first to be isolated incidents, but no arrests were ever made, and on many occasions the mobs had weapons that could only have come from military contacts. While the government has never admitted involvement in these attacks, very few people within the science community believe in the government's innocence.

As attacks on science compounds continued, numerous scientists were separated from their families and interned "for their own safety" by the Health and Freedom government. Internment camps were run by military guards. Conditions were terrible, and medical care was nonexistent. Many died of disease, exposure, and starvation. Oversight was minimal, and some camps were notorious for mistreatment at the hands of the guards. In February 2071, at the height of anti-scientist sentiment, mob violence escalated once more, targeting scientists and engineers that had escaped internment. Between February and May 2071, nearly ten thousand people from the "scientific class" were attacked and killed. Police generally stood by and watched; some took part themselves.

In June 2071, violence dissipated as news broke that researchers from Beijing had produced a new category of antibiotic. The drug works through a mechanism the P-Gen bacterium cannot compensate for. Working in tandem with scientists in Kyoto and Osaka, Beijing researchers have developed what seems, at least so far, to be a reliable vaccine.

Now the U.S. is striving to move past the health crisis and the massacre of the scientists, but the country is fractured by hatred and mistrust. The New Beginnings Party, which grew out of a small but determined peace movement, has just won a national election. They are eager for support from the scientific class, knowing that they will need people to manufacture the new antibiotics and rebuild the health care system. Consequently, the President-Elect and Vice President-Elect have called for people on both sides of the conflict to work together to prevent further violence by establishing transitional justice mechanisms. They insist that the Health and Freedom government, representatives of the military, victims' advocacy organizations, and members of the scientific community must all be involved in these negotiations if the political transition is to yield long-term stability. Faced with widespread public pressure to capitulate and enter negotiations, all of you have agreed to do so, although some have more sincere intentions than others.

Appendix B. Cast List*

1. Scientists, Engineers, and Physicians:

Co-Presidents, National Alliance of Physicians and Scientists (a group founded last year to fight for physician and scientist rights)

Head of Harvard's KIBST Institute (Kavli Institute for Bionano Science and Technology) *A real life organization

President, Royal College of Physicians and Surgeons *A real life organization **Founder, Engineers for Peace**

2. Victims' Advocacy Organizations:

President, National Restorative Justice Initiative

Co-Chairs, United States Center for Victim Support

Founding Leader, End the Violence movement

Representative, Voices for the Voiceless (a grassroots organization with no official hierarchy)

3. Lawyers for the Perpetrators -- Members of the incoming department of justice, assigned to provide legal counsel for people accused of violence (3 students)

4. Military:

General in command of the 600th Military Police Brigade (which oversaw all internment camps in the northeast United States)

Colonel (free to invent their military history)

Lieutenant in the 600th Military Police Brigade (stationed at Ausable River Internment Camp)

Lieutenant (assigned to protect Burlington VT science compound; opened fire on nonviolent activists protesting against privileged treatment of scientists)

5. Current (Outgoing) Government:

President

Vice President (former JAG officer with close ties to the military)

Secretary of Defense

6. Incoming Government (New Beginnings Party):

President-Elect Vice President-Elect Incoming Secretary of Defense Incoming Attorney General

^{*}All organizations are fictional unless otherwise specified.

Appendix C. Breaking News Articles

We distributed "Breaking News" articles through Moodle, Clarkson University's online content delivery system, approximately once a day throughout the two-week simulation (often right before or during class time). These were written in response to developments in student negotiations. The goal of the breaking news articles was to complicate students' thinking about the issues and throw some wrenches into their plans. All names that have not been redacted are fictional.

(1) New York Herald

Breaking News: Minister of Defense approved conditions at Ausable River Camp

Secretary of Defense [Student name] knew of conditions at Ausable River Camp and gave them official approval, according to a classified memo leaked to the *New York Herald* this morning. Based on this memo, the Department of Defense was fully aware that Ausable River Camp "lacked basic sanitation," confined "up to 400 people in space meant for 50," and gave prisoners "barely subsistence level food." In spite of these conditions, [Student name] approved the continued use of Ausable River Camp for the "security" of scientists, physicians, and engineers.

Opened in February 2069, Ausable River was the first of over a dozen camps in which members of the "scientific class" were interned by the Health and Freedom Government. Between 2069 and 2072, five thousand people were held at Ausable River. Nearly ten percent died from illness, abuse, and inadequate living conditions.

Congress has called on the Health and Freedom Government to give a public explanation by Saturday April 4th or face investigation by a Special Prosecutor. If the allegation serves true, the legal authority and credibility of the Secretary of Defense in discussions pertaining to a transitional justice system could be significantly impaired.

(2) Washington Trumpet Breaking News: "The Justice Project" calls for prosecutions of top officials

Nearly two thousand people turned out this morning outside the capitol bearing placards that said *No More Impunity!* The demonstration was organized by "The Justice Project," a high-profile coalition of victims' rights groups. Demonstrators excoriated the courts and the judicial system for letting atrocities against scientists go unpunished. Many called for immediate trials of people known to have committed human rights violations, starting with military officers stationed at internment camps. Some argued that trials should start at the top, with President [Student name] and his Secretary of Defense, [Student name].

In a press conference this afternoon, Justice Project spokesperson Sharon Smith declared, "We recognize that widespread prosecutions would put an undue burden on the justice system, and most soldiers in the camps were just following orders. But we firmly believe the people at the top should be held responsible in the eyes of the law. Otherwise there can be no justice." The Justice Project called on President-Elect [Student name] and Vice President-Elect [Student

name] to publicly support their stance or risk losing an important source of financial and political support. Talking to the *Washington Trumpet*, Smith pointed out that the fundraising and lobbying efforts of The Justice Project contributed substantially to the electoral success of the New Beginnings Party, and she expressed confidence in the continuing close relationship between the two groups. "The longer the New Beginnings Party waits," declared Smith, "the more credibility they lose among their future constituents."

In a counter-demonstration on the Washington Mall, hundreds called on the government to issue a blanket amnesty for everyone involved in violence against the "scientific class." With banners reading *Time to Move On* and *A Fresh Start*, protesters claimed this was the only way for the nation to free itself from a turbulent past.

(3) Washington Trumpet

Breaking news: Vice President conceals close ties to military

Vice President [Student name] has close ties to the military, according to a secret memo leaked to the *Trumpet* this morning. In a public statement released yesterday, the Vice President deflected blame for atrocious conditions at U.S. internment camps from the current administration onto the military. Yet the memo leaked to the *Trumpet* shows that the Vice President's history as a JAG officer left him as a confidente to current upper-echelon military officials. It appears that few major military decisions are made without his knowledge.

(4) Northeast News and Guardian Breaking news: Members of the military call for amnesties

Numerous military officers are calling for blanket amnesties for all personnel who were stationed at internment camps between 2069 and 2072. In the wake of the *New York Herald*'s disclosure about conditions at Ausable River Internment Camp, and demonstrators outside the capitol calling for criminal trials, the military is getting increasingly anxious. One high-ranking colonel who spoke on condition of anonymity called on the incoming Department of Justice to fight for blanket amnesties. The colonel stated, "This is a moral duty for the incoming Department of Justice, particularly [Student names], who are participating in the U.S. Commission on Transitional Justice. Only blanket amnesties can motivate perpetrators of violence to come forward, prevent witch hunts, and legitimize the incoming government."

(5) Northeast News and Guardian Op-Ed: Day-to-day cruelty at Ausable River Camp By: Anonymous victim of Ausable River Camp

I was interned at Ausable River Camp from January to November 2072, along with my father, who was a biologist researching possible cures for the P-Gen crisis. I was seventeen years old when we were taken to the camp. Immediately we were thrust into a different world from the compound where I had grown up. We were housed in unheated barracks in midwinter. There was barely enough food to survive. When people got sick there were no infirmaries or medical supplies; their fellow internees treated them with whatever they could scavenge or sneak out of

the labs.

I want to explain the truth to people who think that only the people at the top deserve to be prosecuted. The worst acts of brutality I witnessed did not come from the colonel in charge of the camp. They came from the enlisted soldiers who guarded us on a daily basis.

In my first month I overheard a conversation between two enlisted men guarding my barracks. The speaker said that he had been ordered to keep inmates alive, make sure they were fed, and above all, keep the scientists in the labs working on a cure. He laughed, calling his orders naive. He called scientists and engineers "parasites" and whispered that until he was reassigned he would do whatever he could to make scientists suffer like his wife and child, who had died from P-Gen. The next day I saw that man bludgeon a fifteen-year-old girl to death.

Not all of the guards at Ausable were that brutal. Some tried to help the sick, brought them extra food or shoes. Most deliberately humiliated us. They took photographs of our humiliation and laughed.

These people were not just following orders. They had free will and they exercised it in the cruelest ways they could. Now that the New Beginnings Party is holding talks about how to move the country forward, everyone must recognize that the atrocities done to scientists are not just the responsibility of people at the highest ranks. If we forgive everyone else for "just following orders," how can we create a society where each person takes responsibility for the well being of their fellow Americans?

(6) New York Herald

Letter to the Editor: Amnesties for what?

By: Camilla de los Santos, Professor of Political Theory, Cornell University

This week at the U.S. Commission on Transitional Justice, General [Student name] called for blanket amnesties for military personnel involved in internment camps. He went on to state that incidents of mistreatment at the internment camps were minimal and all allegations of abuse have been investigated by the army and made public. If these claims are true, why would the military need blanket amnesties at all?

(7) Washington Trumpet

Editorial: Support for victims

By: Tanisha Roberts, member of the grassroots organization "Voices for the Voiceless"

The U.S. Commission on Transitional Justice provides an important ray of hope to our country after decades of disease, violence, and hate. I hope that in the rush to achieve justice, the commission keeps its focus on the needs of victims. Our voices must be heard; our experiences must be validated. We need to know that the new government and our fellow Americans are committed to righting the wrongs of the past three decades, not only through the justice exacted from perpetrators but through the help and resources offered to those that have suffered.

(8) Northeastern News and Guardian Breaking News: Violence against women at scientist internment camps

Women were subjected to gender-based harassment and abuse at numerous internment camps, according to testimonies that have recently emerged from survivors of camps across the country. Women in over 50% of internment camps were targets of hostile and sexualized taunts. Some lived in fear of sexual assault. Pregnant women were forced to give birth in dangerously unhygienic conditions with no medical resources. Reports of further abuses are just emerging, and a number of women have shared harrowing stories with the United States Center for Victim Support. Several have asked Center for Victim Support Co-Chairs [Student names] to ensure that any truth commissions or related mechanisms developed by the U.S. Commission on Transitional Justice include specific provisions for the needs and stories of women.

(9) New York Herald

Breaking News: Secret memos expose close ties between Health and Freedom Government and Top Military Officials

A series of secret memos leaked to the New York Herald has exposed deep ties between the Health and Freedom Government and top military leaders. According to these documents, major decisions about conditions in internment camps, including appalling sanitation, deeply insufficient food, and inadequate medical care, were made jointly by government officials and a group of high-ranking officers including Vice President [Student name] and General [Student name]. Protesters surrounded the Capitol Building this morning demanding prison sentences for both Vice President [Student name] and General [Student name].

(10) Washington Trumpet Breaking News: Hidden internment camp comes to light

This morning, human rights investigators discovered a Quonset hut full of documents about a heretofore unknown internment camp. These documents reveal that the Health and Freedom Government ordered over a hundred scientists imprisoned in a clandestine internment camp on the U.S.-Canadian border. The rationale behind this clandestine camp is, as yet, unknown. Referred to as the Rainy River Camp, this location was guarded by a skeleton crew provided by the military, and military officials have refused to release the names of the guards. There appear to be very few survivors. All suffer from post-traumatic stress disorder and were unable to speak to the press. This discovery demonstrates beyond doubt that the Health and Freedom Government colluded with the military to persecute American scientists.

(11) Washington Trumpet

Breaking News: Tensions rise between government and military

Rumors about the threat of a military coup could not be substantiated by the *Trumpet*, but tensions are growing between the military and the Health and Freedom government. Several military officers who refused to be named told *Trumpet* reporters they were frustrated at the government's refusal of responsibility for human rights violations in internment camps. One highly ranked officer expressed anger that the current administration was deflecting blame for all atrocities onto the military. Another, who only spoke with the *Trumpet* on the condition of anonymity, declared: "The Health and Freedom government should remember how much they need the military. Our protection upholds their rule."

(12) New York Herald

Breaking News: U.S. Commission on Transitional Justice comes to partial agreement *summary of agreement reached by students (second to last day of the simulation)

The U.S. Commission on Transitional Justice came to a partial agreement about a Truth and Reconciliation Commission this afternoon. In an impressive show of unity and efficiency by an institution representing many opposing interests, the commission approved six conditions for a proposed TRC:

- (1) Applications for amnesty must be voluntary.
- (2) The TRC must be run by an independent third party.
- (3) Each hearing must be accompanied by an independent investigation to verify the facts provided in TRC testimonies.
- (4) To receive amnesty, applicants must demonstrate a sincere desire to move on.
- (5) They must demonstrate a political motive for the violence they committed.
- (6) They must consent to having their hearings recorded on video.

The commission remains divided on two conditions for amnesty:

- (1) Whether amnesty should be contingent on full disclosure.
- (2) Whether amnesty should be contingent on full cooperation with the TRC.

The administration of the Health and Freedom government expressed reservations about both of these issues. Also to be determined are the questions of who would qualify as a trustworthy independent third party and how best to give support to victims.

(13) New York Herald

Breaking News: U.S. Commission on Transitional Justice achieves full agreement *Summary of the agreement reached by students on the final day, along with a vision of some future developments

In a historic moment on Friday April 20, the U.S. Commission on Transitional Justice reached a full agreement on the creation of a Truth and Reconciliation Commission. Faced with intense debate over the condition of full disclosure, the commission agreed that amnesty

applicants must make a full disclosure of their actions within the direct scope of the case at hand, but cannot be compelled to testify about actions outside the scope of the crime they are addressing.

These included symbolic monetary reparations; rebuilding infrastructure, especially access to water, food, education, and health care; allocating funding for science and medicine; ensuring that police prevent further violence; developing an independent ethics board for government oversight; and charging the Department of Justice to prevent future atrocities from going unchecked. Symbolic reparations received some debate due to limited financial resources. The incoming government took all recommendations under advisement and pledged to put as many as practicable into practice.

Marcie Sorenson, Political Advisor to former Republican and Democratic governments, praised the agreement and all parties involved. "This plan demonstrates significant nuance and insight," she stated. "It combines a need for accountability with a dedication to restoring mutual trust. More than that, it builds on previous truth recovery mechanisms around the world while accounting for the specific needs of our nation in the aftermath of the P-Gen crisis." Joseph Chen, former U.K. ambassador to the U.S., highlighted the courage of President-Elect [Student name] and President [Student name]. "Both of these leaders are models of debate and cooperation," he stated. "President [Student name] rightly forced his colleagues to confront the complexities of the issues. He had strong motives not to cooperate with the commission, but instead he came to an agreement with his political rivals. President-Elect [Student name], for her part, prioritized the needs of the nation above her own, consistently listening to the voices of all parties rather than advancing her own agenda."

Many people involved in the negotiations have been approached by NGOs and legal organizations to lead conflict resolution teams elsewhere; sources reveal that [Student names] have received prestigious offers already, and national and international NGOs plan on approaching many other commission members. As Sorenson declared, "The commission's ability to reach an agreement in the face of ongoing and principled disagreement embodies the moral imagination. Conflict resolution is not about linear, efficient progress; it is about using lateral thinking to carve out a settlement when two sides are entrenched in their views. That is exactly what this commission did this week."