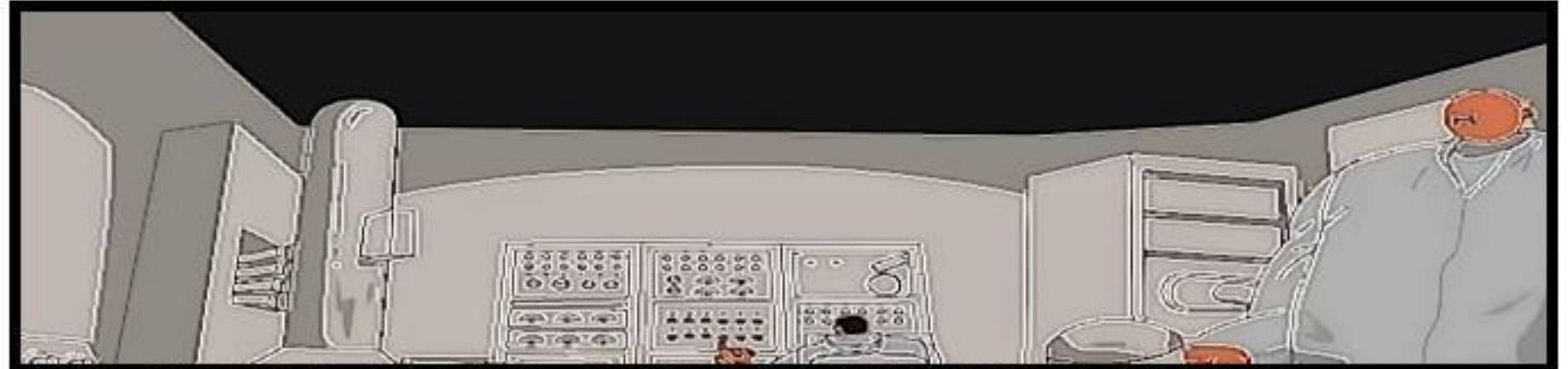


"There are significant potential risks to both under- and overregulation in this field."

- Jesse Bloom, virologist

"WE DIDN'T REPLACE IT. IN THE VENTILATION SYSTEM AND DIDN'T REPLACE IT. IN THE VENTILATOR SYSTEM," HE SAID.



HIS NOTE TO THE SUPERVISOR WAS NEVER TRANSFERRED TO THE OFFICIAL LOGBOOK, SO WHEN THE NEXT TIME, IT WILL BE THERE.



AS THE 7 A.M. SHIFT ROLLED IN, WORKERS SIMPLY STARTED PRODUCTION AS USUAL. "WE'RE HERE TO WORK. THAT'S WHAT WE DO," ONE WORKER SAID.



THIS WOULD HAVE BEEN A MINOR MISTAKE IN MOST LABS. BUT THIS LAB WAS A BIOLOGICAL WEAPONS FACILITY PRODUCING HUGE QUANTITIES OF ANTHRAX.



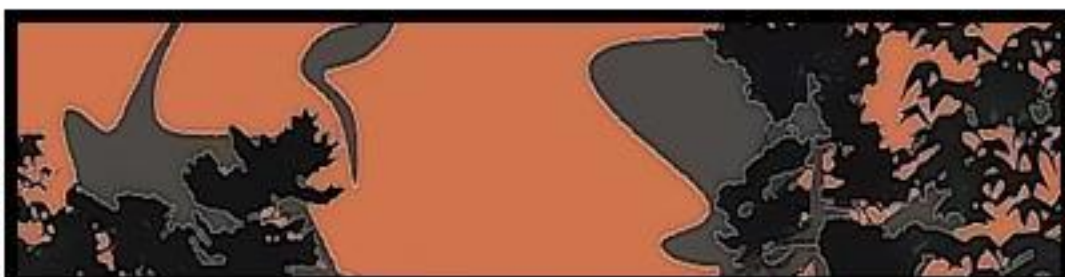




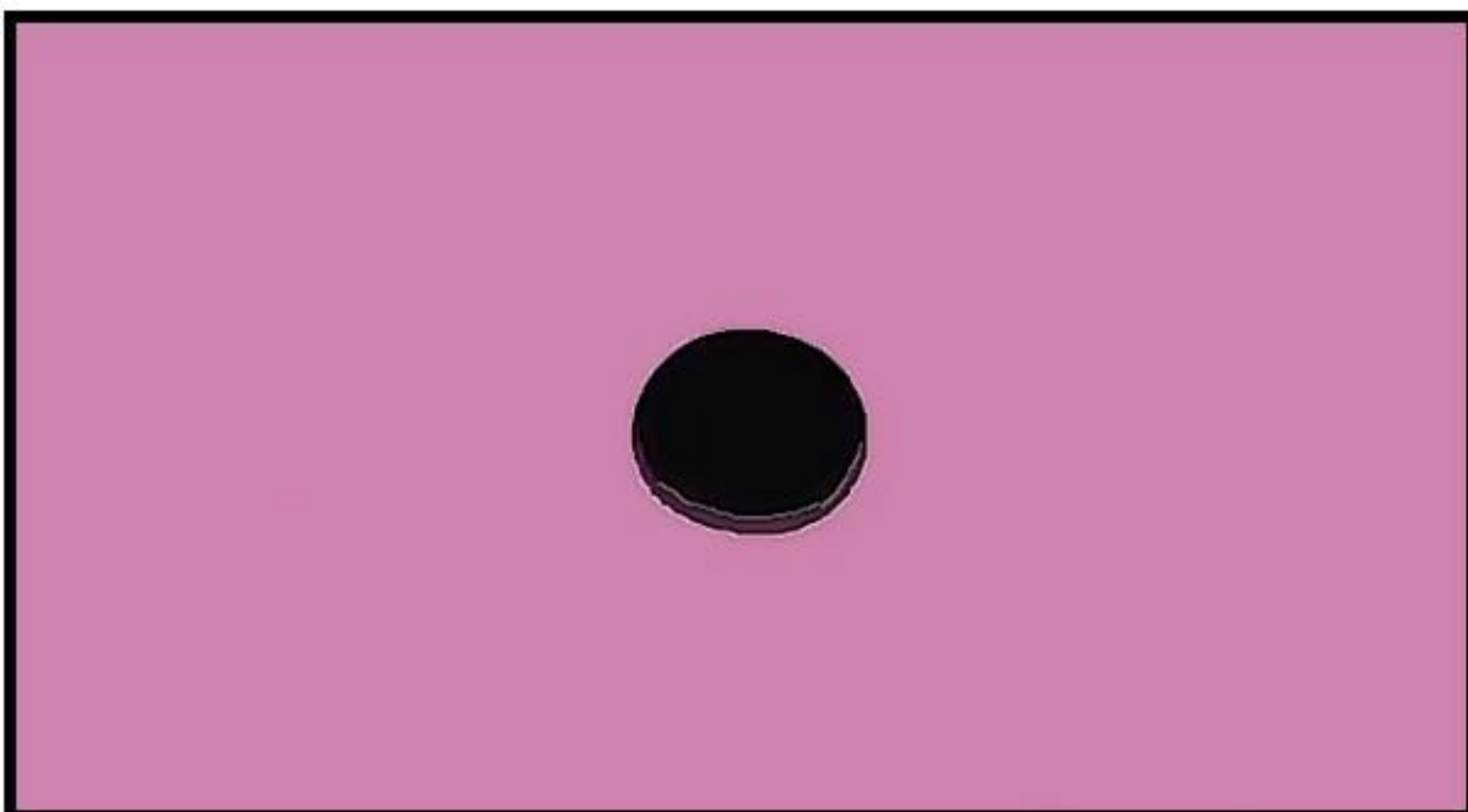
IF INHALED, THE VIRUS CAN KILL UP TO 90% OF THOSE IT INFECTS.



THIS DEADLY ANTHRAX POWDER FLOATED OUT INTO THE SKY FOR HOURS, CAUSING THE LARGEST DOCUMENTED OUTBREAK OF ANTHRAX.



OUTBREAK OF INHALATION ANTHRAX ON RECORD AND RESULTING IN AT LEAST 64 DEATHS. AT LEAST 64 PEOPLE WERE KILLED IN THE OUTBREAK.




BIOSECURITY EXPERTS ARE WORRIED ABOUT AN EVEN MORE DANGEROUS KIND OF LAB LEAK. SINCE THE 1970S, RESEARCHERS HAVE BEEN MANIPULATING THE DNA OF MICROBES TO GIVE THEM ABILITIES.

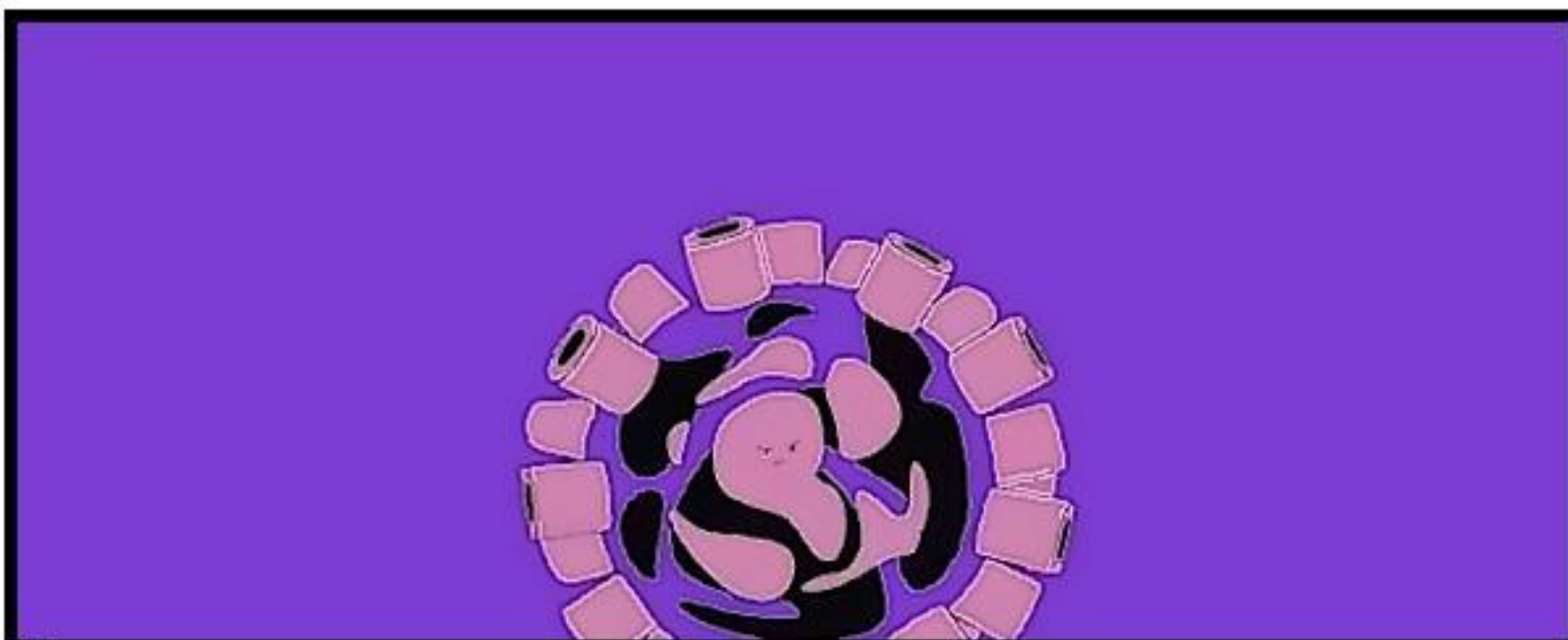
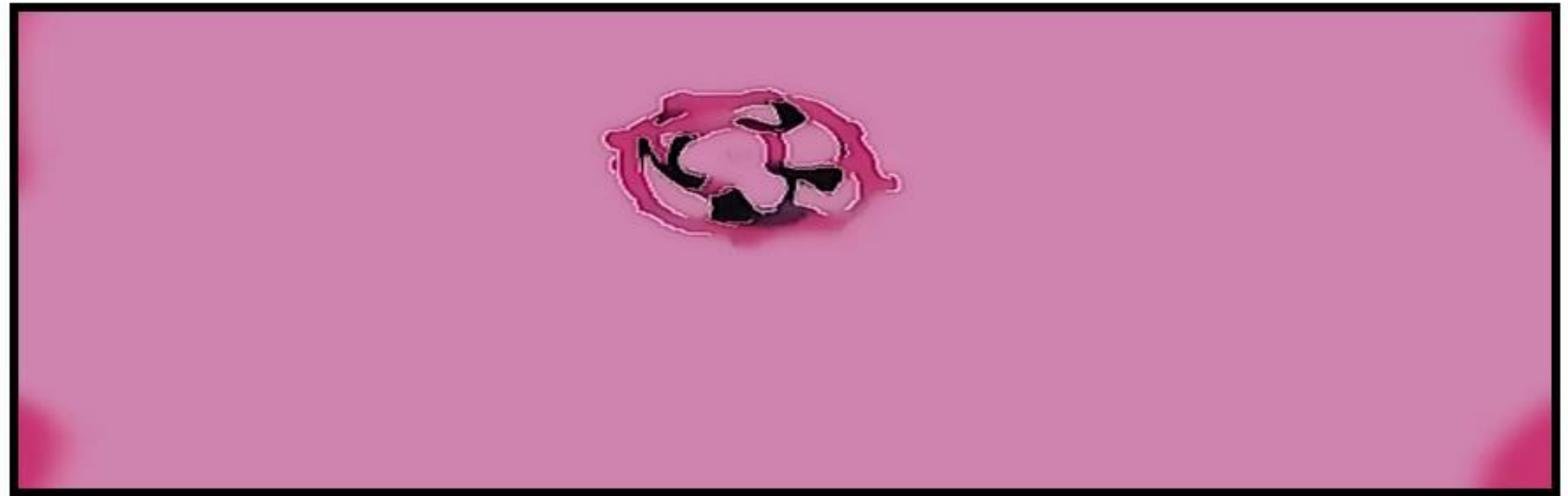




GAIN-OF-FUNCTION WORK INCLUDES A HUGE BODY OF SCIENTIFIC RESEARCH. THE MAJORITY OF THIS WORK HELPS HUMANITY WITH VERY LITTLE RISK. FOR EXAMPLE, ENGINEERED VIRUSES ARE USED IN VACCINE PRODUCTION, GENE THERAPY AND CANCER TREATMENTS.



ENHANCED POTENTIAL PANDEMIC PATHOGENS ARE VARIANTS OF WELL-KNOWN VIRUSES. EPPS ARE TYPICALLY VARIANTS OF VIRUSES SUCH AS EBOLA OR AVIAN INFLUENZA.



"THE STAKES OF THIS KIND OF WORK ARE MUCH HIGHER. SAY, MORE TRANSMISSIBLE OR MORE DEADLY," HE SAYS.



IF EVEN ONE UNUSUALLY DANGEROUS VIRUS ESCAPED A LAB, IT COULD CAUSE A GLOBAL PANDEMIC. SINCE DEVELOPING EPPS, ARGUE THIS RESEARCH COULD HELP US PREPARE FOR FUTURE PANDEMICS.

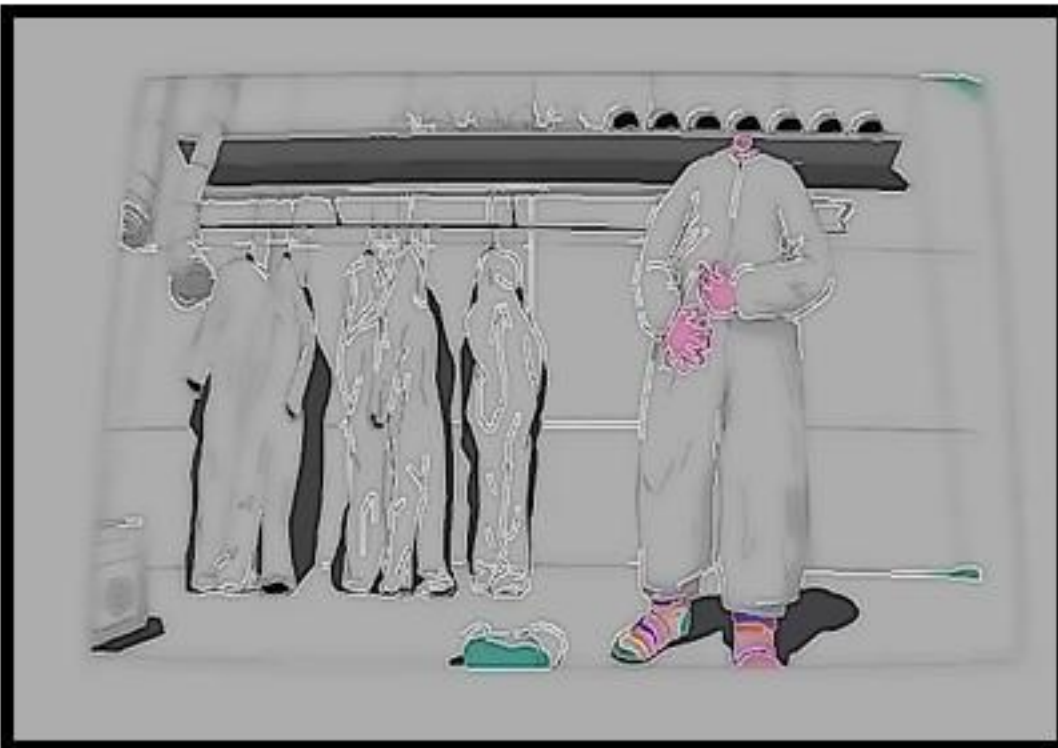




THE EPP HAS THE NOVEL ABILITY TO SPREAD THROUGH THE AIR BETWEEN MAMMALS. ADVOCATES OF THE PROJECT ARGUED THAT BY CREATING THIS EPP, WE COULD LEARN CRUCIAL INFORMATION.



MANY CRITICS ARGUED THAT IT'S UNCLEAR WHETHER BIRD FLU WOULD EVER EVOLVE IN THE WILD. ABOUT A WORST-CASE SCENARIO VIRUS UNDER CONTROLLED CONDITIONS.



THE SCIENTISTS BELIEVED THE KNOWLEDGE GAINED BY STUDYING THIS DANGEROUS VIRUS WASN'T THE SAME AS IT DID IN THE LAB. CONSEQUENTLY, THEY BELIEVED THE RESEARCH WAS A WASTE.



EVERYONE AGREES THAT AN EPP-P LAB LEAK COULD BE CATASTROPHIC. BOTH SIDES OF THIS ONGOING DEBATE ARE TRYING TO SAVE LIVES. THEY JUST DISAGREE ON THE BEST WAY TO DO IT.




LABS THAT WORK WITH DANGEROUS PATHOGENS ARE DESIGNED WITH NUMEROUS SAFETY FEATURES. THESE INCLUDE VENTILATION SYSTEMS THAT DECONTAMINATE AIR AND AIRTIGHT SPACE SUITS.






EVEN WHEN OUR TECH DOESN'T FAIL, THERE'S STILL ROOM FOR THE MOST COMMON KIND OF MISTAKE. MANY HUMAN ERRORS ARE INCONSEQUENTIAL. A RESEARCHER SPILLS A SAMPLE, BUT QUICKLY DISINFECTS THE OTHERWISE WELL-CONTROLLED ENVIRONMENT.



THE INCIDENT IS ONE OF A NUMBER OF INCIDENTS THAT HAVE OCCURRED IN THE PAST WEEK. OTHER INCIDENTS, HOWEVER, ARE MUCH MORE CONCERNING.



IN 2009, A RESEARCHER ACCIDENTALLY STUCK THEMSELVES WITH AN EBOLA-CONTAMINATED NEEDLE, ENDANGERING OTHERS.



IN 2014, SIX VIALS CONTAINING THE VIRUS THAT CAUSES SMALLPOX WERE FOUND IN AN UNSECURED STORAGE ROOM. THAT SAME YEAR, A CDC SCIENTIST UNKNOWINGLY CONTAMINATED A SAMPLE OF RELATIVELY HARMLESS BIRD FLU WITH A DEADLY LAB-GROWN VARIANT

