Analyzing a Research Method in Pop Culture

In the movie Oppenheimer, J. Robert Oppenheimer conducts research to ultimately lead to the Manhattan Project and development of the atomic bomb. His process involves gathering a team of top scientists, studying quantum mechanics, and conducting experiments in nuclear physics. He coordinates a large amount of data, compares theoretical models with results from experiments, and oversees the design and testing at Los Alamos. The research is both collaborative and experimental, relying on trial and error, as well as refinement under a time pressure. A strength of Oppenheimer's approach is his ability to put together knowledge from many disciplines and organize many brilliant scientists to come together and collaborate on the project. However, a weakness is that he often sidelined the ethics of the project, as the urgency of war pushed the team to prioritize results over any moral questions. One way Oppenheimer could improve his research process would be by creating more room for ethical debate while at the same time working toward scientific progress, ensuring that the ethics and consequences of discovery are weighed as carefully as the science itself.