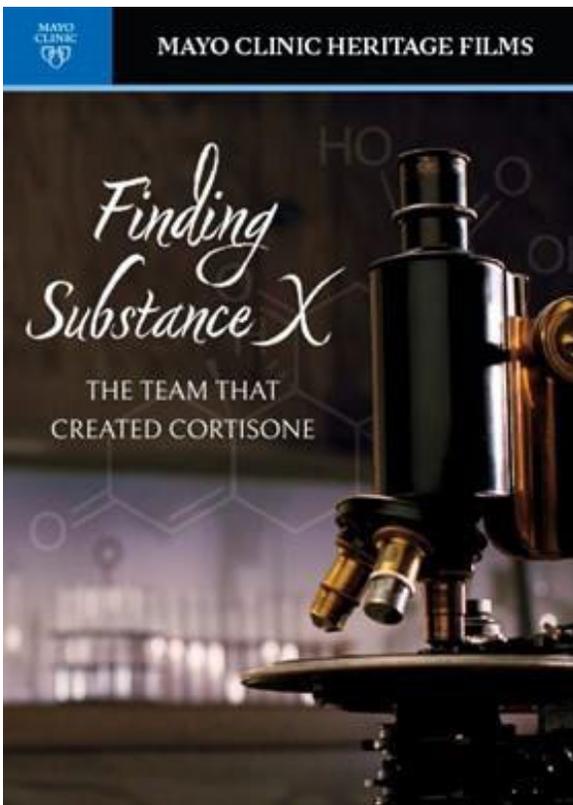




Mayo Clinic Heritage Films Discussion Guide

Finding Substance X The Team That Created Cortisone



In April of 1949, the world learned of one of the landmarks of 20th century medicine. A new drug developed at Mayo Clinic had been given to patients with rheumatoid arthritis. The astonishing results were captured on film. Patients who could barely walk were seen moving with ease after only a few days of treatment.

It was the result of a 20-year collaboration between an innovative chemist, a dedicated physician and their colleagues. Their search for a mysterious hormone ultimately led to new hope for patients, an important new class of medications and the Nobel Prize.

Discussion Questions

1. What scientific or historic information in this film was most surprising to you?
2. The initial research on hormones of the adrenal gland was not aimed at treating any particular condition, but an effort to learn more about these substances. There was no guarantee they would prove to be of medical value. Why do you think Mayo Clinic supported this work for twenty years, including through the Depression?

3. When Dr. Sarett was working on synthesizing Compound E, one of his colleagues scoffed, "This young man thinks he can do what some of the world's best chemists have been trying to do for years without success." What are good ways to manage and appropriately encourage a team member with high ambitions?
4. How would you feel about being the first to take an unproven medication? How would you feel if it advanced the treatment for a disease or medical condition but left you with serious side effects?
5. The film describes Dr. Hench and Dr. Kendall as an "odd couple" with opposite temperaments. What are the challenges and advantages of collaboration between two very different types of people?
6. Dr. Hench simply ignored the effect his cleft palate had on his speech. Have you known people who refused to let a physical or cognitive challenge limit their ambitions?
7. What do you think of the arrangement by which those involved in the creation and manufacture of cortisone agreed to assign their patents to a third party rather than monopolize production?
8. The cortisone clinical trials were conducted according to the protocols of the 1940s. How does that differ from the way trials are conducted today? What lessons can we learn from this?