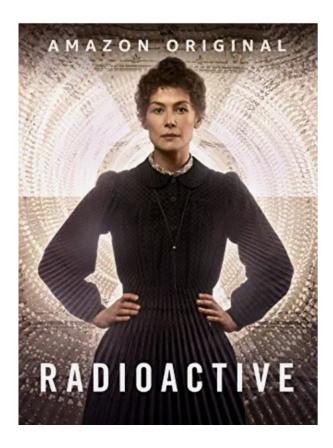
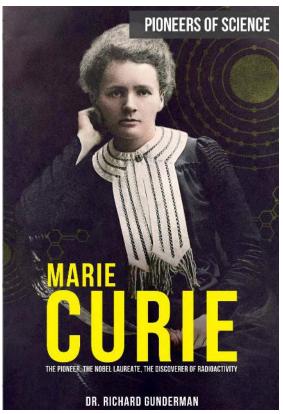
Medicine on the big and small screen: Marie Curie in two different lights





Radioactive

Starring Rosamund Pike, Sam Riley, Sian Brooke Director: Majane Satrapi Amazon Studios on Amazon Prime Video, July 24, 2020. Running time: 109 minutes.

Marie Curie: The Pioneer, the Nobel Laureate, the Discoverer of Radioactivity

Richard B. Gunderman, MD, PhD Welbeck Publishing September 1, 2020, 160 pages

Reviewed by Laurie Goss

arie Curie was a fascinating woman. As a young girl, I remember the awe I felt when I read a short, not very colorful, book about her. Since that time, more than a dozen books have been written about her and a handful of movies have

been produced. The most recent releases about Madame Curie are the film, *Radioactive*, and Dr. Richard Gunderman's (A Ω A, University of Chicago, 1992) book, *Marie Curie: The Pioneer, the Nobel Laureate, the Discoverer of Radioactivity*, both delivered in 2020. Although the subject is the same, the book and the movie offer very different experiences.

The book is an historical primer of science and scientists in the late 1800s and early 1900s; as well as a detailed history of Poland, the war, and Nobel prizes in general. The movie, however, is a 360 degree look at the life of Marie, showcasing her intelligence, and excitement for learning, along with her emotional side as she tries to fulfill her roles both at home and in the laboratory.

Gunderman begins his book with nuggets of information about other scientists and discoveries of the time, and then delves into Marie's heritage and family history, including a detailed look at her childhood, the loss of her mother and sister when she was young, and the hardships she faced while trying to continue her education.



Marie and Pierre Curie in their lab in Radioactive.

The movie begins with Marie already in Paris, working at the university, where she is portrayed as a scientist and a woman who meets and falls in love with Pierre Curie. Rosamund Pike's interpretation of Marie is stunning, allowing viewers a window into the woman, the wife, and the driven scientist.

Marie is a somewhat difficult, no-nonsense woman, constantly fighting for her research; she is misunderstood by many and garners empathy from no one, except perhaps her husband. Pierre's presence in Marie's life softens her edges and allows her to show her lighter side. After his death she once again becomes harsh and non-yielding. However, late in life, when working with her daughter, she once again begins to soften.

While Gunderman masterfully describes how difficult Marie's life becomes as she works to fulfill her roles as wife, mother, and scientist, the movie allows the audience to truly feel the kinetic energy that is her life. Both the book and the movie paint a descriptive picture of Marie's hard work in the laboratory and at home. Her long hours extracting highly radioactive materials in the lab, followed by her return home to the responsibilities belonging to all women of the time—effectively demonstrate how her load was not lightened in any way because she was a mother with a career.

The unbelievable gender bias that Marie Curie endured is palpable in the movie when only Pierre is nominated for the Nobel Prize. Watching her stoicism as Pierre accepts the award in Sweden is heart-wrenching, and simply maddening to watch.

As he becomes ill, Pierre begins to worry about the safety of radium and warns his about possible implications. He is concerned about its free and open use. After his death, her apprehension slowly grows.

The film briefly touches on her phobia of hospitals when she first meets Pierre, and again when she gives birth to her second daughter. Thus, it is surprising when Marie's daughter, Irene, a battlefield radiologist, forces her mother into confronting her fears to ensure her X-ray machines are used to save the lives and limbs of young men during the war. In the end, Marie eventually overcomes her fears and pushes full force into what she called her last fight, joining troops on the battlefield.

While she is being rolled into the hospital at the end of her life, on a gurney, she sees her life pass in front of her. She sees her childhood, her mother's passing, her life with Pierre and the girls. She also sees the changes in the world—the medical advances and lives that will be saved, and the destructive bombs that were created from her work.



A discouraged-lookiong Marie Curie alone in her laboratory.

Although the book and the movie offer different experiences, both are well worth enjoying.

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