1. Record Nr. UNINA9911049064803321

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Titolo	Beyond the Genius : Nobel Stories of Passion and Controversy in Science / / by Virginia Shepherd, Charles Brau
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	3-032-02735-7
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (418 pages)
Collana	Copernicus Books, Sparking Curiosity and Explaining the World, , 2731-8990
Disciplina	509
Soggetti	Physics - History Science - History Medicine - Research Biology - Research Science - Moral and ethical aspects Chemistry Technology History History of Physics and Astronomy History of Science Biomedical Research Science Ethics History of Technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: The Merchant of Death: Alfred Nobel – Fortunes, Misfortunes and the Prize -- Chapter 2: Bread from Air: Fritz Haber – 1918 Nobel Prize in Chemistry -- Chapter 3: The Atom is Split: Otto Hahn—1944 Nobel Prize in Chemistry -- Chapter 4: The Atomic Bomb that Wasn't: Werner Heisenberg 1932 Nobel Prize in Physics -- Chapter 5: The Magic Crystal: Shockley, Bardeen, and Brattain - 1956 Nobel Prize in Physics -- Chapter 6: The Prion Diseases: Daniel Carleton Gajdusek - 1976 Nobel Prize in Physiology or Medicine (shared with Baruch Blumberg) -- Chapter 7: Afterword.

Sommario/riassunto

Using the fascinating stories surrounding the lives and struggles of eight Nobel Laureate scientists, this book illustrates the complexity of scientific discovery. Factors such as their passion for science, gender, Jewish roots, nationalism, self-promotion, and just plain hubris all shaped their careers and their discoveries, while competition and politics influenced the Nobel Prizes that they were awarded or denied. For example, the discovery of fission by Hahn and Meitner depended on perseverance, taking months of tedious work to prove that the accepted theories were wrong, while the discovery of the transistor by Bardeen and Brattain was serendipitous. The lives of the Nobel Laureates also illustrate the importance of ethics in science. Fritz Haber’s fixation of nitrogen to make fertilizer now feeds half the world’ s population, but he also introduced poisonous gas into World War I, and after sharing the Nobel Prize for the transistor, William Shockley went into racist eugenics. Several of the lives described in the book, show how Nobel Prize discoveries have had varying impacts on the world, from the fixation of nitrogen and its huge influence on global supply and the transistor’s birthing of the digital age, to a disease found deep in the jungles of Papua New Guinea and prion research. Finally, the book tells the story of Alfred Nobel himself, and the founding of the Nobel Prizes. How the Prizes have been awarded – or denied – and how they have affected the lives and of scientists and their discoveries make an engaging story. Each scientific discovery discussed in the text is explained in elementary terms, making this book essential reading for anyone interested in science as a human endeavor or the complex relationship between science and society. .