

## ***Nobel Prize Women In Science Their Lives Struggles And Momentous Discoveries Sharon Bertsch Mcgrayne***

History has seen many incredible men and women make their mark on the field of science. One woman who will forever be remembered for her groundbreaking work is Marie Curie. She was one of the first people to explore radioactivity, and her contributions led her to become the first woman to win a Nobel Prize. This book explores Curie's life, accomplishments, and legacy.

Brief biographies of women involved in science throughout the ages. Chronicles the achievements and discoveries of women scientists.

The historian and author of *Lillian Gilbreth* examines the "Great Man" myth of science with profiles of women scientists from Marie Curie to Jane Goodall. Why is science still considered to be predominantly male profession? In *The Madame Curie Complex*, Julie Des Jardin dismantles the myth of the lone male genius, reframing the history of science with revelations about women's substantial contributions to the field. She explores the lives of some of the most famous female scientists, including Jane Goodall, the eminent primatologist; Rosalind Franklin, the chemist whose work anticipated the discovery of DNA's structure; Rosalyn Yalow, the Nobel Prize-winning physicist; and, of course, Marie Curie, the Nobel Prize-winning pioneer whose towering, mythical status has both empowered and stigmatized future generations of women considering a life in science. With lively anecdotes and vivid detail, *The Madame Curie Complex* reveals how women scientists have changed the

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course of science—and the role of the scientist—throughout the twentieth century. They often asked different questions, used different methods, and came up with different, groundbreaking explanations for phenomena in the natural world.

Since 1901 there have been over three hundred recipients of the Nobel Prize in the sciences. Only ten of them -- about 3 percent -- have been women. Why? In this updated version of Nobel Prize Women in Science, Sharon Bertsch McGrayne explores the reasons for this astonishing disparity by examining the lives and achievements of fifteen women scientists who either won a Nobel Prize or played a crucial role in a Nobel Prize - winning project. The book reveals the relentless discrimination these women faced both as students and as researchers. Their success was due to the fact that they were passionately in love with science. The book begins with Marie Curie, the first woman to win the Nobel Prize in physics. Readers are then introduced to Christiane Nusslein-Volhard, Emmy Noether, Lise Meitner, Barbara McClintock, Chien-Shiung Wu, and Rosalind Franklin. These and other remarkable women portrayed here struggled against gender discrimination, raised families, and became political and religious leaders. They were mountain climbers, musicians, seamstresses, and gourmet cooks. Above all, they were strong, joyful women in love with discovery. Nobel Prize Women in Science is a startling and revealing look into the history of science and the critical and inspiring role that women have played in the drama of scientific progress.

50 Fearless Pioneers who Changed the World

One Woman's Personal Journey Through Sexism in Science

The Politics of Excellence

Women in Science

The Remarkable Life of Nanoscience Pioneer Mildred

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Women who Have Won the Nobel Prize

*From ancient times to the present day, scientifically inclined women in many cultures have had to battle against the traditional belief that men are more cognitively adept than women. At times throughout history, women were persecuted for their attempts to break down traditional gender barriers. Today, women scientists and mathematicians must continue to defend the quality of their work and demand the respect they deserve in the mathematical and scientific communities.*

*A to Z of Women in Science and Math, Revised Edition profiles 195 women who fought against these stereotypes throughout history and all over the world to forge new discoveries and theories that would eventually change the way we view science. This thoroughly revised book updates the story of each individual to the present day and features 38 new profiles. Among the profiles included are those of chemists, astronomers, geologists, environmental scientists, and a range of other professions and careers. In addition, new photographs have been added, and the bibliography has been updated. Subject indexes allow the reader to search by such*

professions as microbiology and paleontology. Additional subject indexes organize individuals by country of birth, country of major scientific activity, and year of birth.

*A Forbes, Physics Today, Science News, and Science Friday Best Science Book Of 2018*  
The inside story of a quest to unlock one of cosmology's biggest mysteries, derailed by the lure of the Nobel Prize. What would it have been like to be an eyewitness to the Big Bang? In 2014, astronomers wielding BICEP2, the most powerful cosmology telescope ever made, revealed that they'd glimpsed the spark that ignited the Big Bang. Millions around the world tuned in to the announcement broadcast live from Harvard University, immediately igniting rumors of an imminent Nobel Prize. But had these cosmologists truly read the cosmic prologue or, swept up in Nobel dreams, had they been deceived by a galactic mirage? In *Losing the Nobel Prize*, cosmologist and inventor of the BICEP (Background Imaging of Cosmic Extragalactic Polarization) experiment Brian Keating tells the inside story of BICEP2's mesmerizing discovery and the scientific drama that ensued. In an adventure story that spans the globe from Rhode Island to the

*South Pole, from California to Chile, Keating takes us on a personal journey of revelation and discovery, bringing to vivid life the highly competitive, take-no-prisoners, publish-or-perish world of modern science. Along the way, he provocatively argues that the Nobel Prize, instead of advancing scientific progress, may actually hamper it, encouraging speed and greed while punishing collaboration and bold innovation. In a thoughtful reappraisal of the wishes of Alfred Nobel, Keating offers practical solutions for reforming the prize, providing a vision of a scientific future in which cosmologists may, finally, be able to see all the way back to the very beginning. Discover some of the inspirational men and women who have received Nobel Prizes in Physics, Chemistry and Medicine from 1901 to the present day, among them Marie Curie, Hermann Joseph Muller, and Donna Strickland. A glimpse into the often surprising lives and sometimes accidental discoveries of a group of extraordinary scientists, this fascinating collection shows that the science you learn at school really can change the world.*

*'To say this series is "empowering" doesn't do it justice. Buy a copy for your daughters,*

*sisters, mums, aunts and nieces - just make sure you buy a copy for your sons, brothers, dads, uncles and nephews, too.' - indy100*

*'Here's to no more forgotten women.' Evening Standard The women who shaped and were erased from our history. The Forgotten Women series will uncover the lost histories of the influential women who have refused over hundreds of years to accept the hand they've been dealt and, as a result, have formed, shaped and changed the course of our futures. The Leaders weaves together 48\* unforgettable portraits of the true pioneers and leaders who made huge yet unacknowledged contributions to history, including: Grace O'Malley, the 16th century Irish pirate queen Sylvia Rivera, who spearheaded the modern transgender rights movement Agent 355, the unknown rebel spy who played a pivotal role in the American Revolution Noor Inayat Khan, who went undercover to spy for the French Resistance and became Nazi enemy no. 1 Amina of Zazzau, the formidable ancient Muslim warrior queen of Northern Nigeria Chapters including Rebels; Warriors; Rulers; Activists and Reformers shine a spotlight on the rebellious women who defied the odds, and the opposition, to change the world around*

them. \*The number of Nobel-prize-winning women.

*Losing the Nobel Prize: A Story of  
Cosmology, Ambition, and the Perils of  
Science's Highest Honor*

*Nobel Prizes and Life Sciences*

*A Lab of One's Own*

*Celebrating the 100th Anniversary of  
Madame Marie Sklodowska Curie's Nobel  
Prize in Chemistry*

*The Hidden History of Women in Science  
Radio-active Substances*

*NEW YORK TIMES BESTSELLER The revolutionary  
book coauthored by the Nobel Prize winner who  
discovered telomerase and telomeres' role in the aging  
process and the health psychologist who has done  
original research into how specific lifestyle and  
psychological habits can protect telomeres, slowing  
disease and improving life. Have you wondered why some  
sixty-year-olds look and feel like forty-year-olds and why  
some forty-year-olds look and feel like sixty-year-olds?  
While many factors contribute to aging and illness, Dr.  
Elizabeth Blackburn discovered a biological indicator  
called telomerase, the enzyme that replenishes telomeres,  
which protect our genetic heritage. Dr. Blackburn and Dr.  
Elissa Epel's research shows that the length and health of  
one's telomeres are a biological underpinning of the long-  
hypothesized mind-body connection. They and other  
scientists have found that changes we can make to our*

*daily habits can protect our telomeres and increase our health spans (the number of years we remain healthy, active, and disease-free). THE TELOMERE EFFECT reveals how Blackburn and Epel's findings, together with research from colleagues around the world, cumulatively show that sleep quality, exercise, aspects of diet, and even certain chemicals profoundly affect our telomeres, and that chronic stress, negative thoughts, strained relationships, and even the wrong neighborhoods can eat away at them. Drawing from this scientific body of knowledge, they share lists of foods and suggest amounts and types of exercise that are healthy for our telomeres, mind tricks you can use to protect yourself from stress, and information about how to protect your children against developing shorter telomeres, from pregnancy through adolescence. And they describe how we can improve our health spans at the community level, with neighborhoods characterized by trust, green spaces, and safe streets. THE TELOMERE EFFECT will make you reassess how you live your life on a day-to-day basis. It is the first book to explain how we age at a cellular level and how we can make simple changes to keep our chromosomes and cells healthy, allowing us to stay disease-free longer and live more vital and meaningful lives.*

*A “beautifully written” (Kirkus Reviews, starred review) memoir-manifesto from the first female director of the National Science Foundation about the entrenched sexism in science, the elaborate detours women have take to*

*bypass the problem, and how to fix the system. If you think sexism thrives only on Wall Street or Hollywood, you haven't visited a lab, a science department, a research foundation, or a biotech firm. Rita Colwell is one of the top scientists in America: the groundbreaking microbiologist who discovered how cholera survives between epidemics and the former head of the National Science Foundation. But when she first applied for a graduate fellowship in bacteriology, she was told, "We don't waste fellowships on women." A lack of support from some male superiors would lead her to change her area of study six times before completing her PhD. A Lab of One's Own is an "engaging" (Booklist) book that documents all Colwell has seen and heard over her six decades in science, from sexual harassment in the lab to obscure systems blocking women from leading professional organizations or publishing their work. Along the way, she encounters other women pushing back against the status quo, including a group at MIT who revolt when they discover their labs are a fraction of the size of their male colleagues. Resistance gave female scientists special gifts: forced to change specialties so many times, they came to see things in a more interdisciplinary way, which turned out to be key to making new discoveries in the 20th and 21st centuries. Colwell would also witness the advances that could be made when men and women worked together—often under her direction, such as when she headed a team that helped to uncover the source of anthrax used in the 2001 letter*

*attacks. A Lab of One's Own is "an inspiring read for women embarking on a career or experiencing career challenges" (Library Journal, starred review) that shares the sheer joy a scientist feels when moving toward a breakthrough, and the thrill of uncovering a whole new generation of female pioneers. It is the science book for the #MeToo era, offering an astute diagnosis of how to fix the problem of sexism in science—and a celebration of women pushing back.*

*A compilation of sixty biographical sketches of influential female scientists, discussing topics like the state of the modern female scientist and the underrepresentation of women at the higher levels of academia.*

*Draws on diaries, letters, and family interviews to discusses the lesser-known achievements and scientific insights of the Nobel Prize-winning scientist and producer of radium, documenting how she was compromised by the prejudices of a male-dominated society in spite of her accomplishments. 30,000 first printing.*

*The Code Breaker*

*The Women who Changed Science*

*Gertrude Elion*

*Behind the Nobel Prize in Science*

*Nobel Prize Women in Science*

*Advice for Young Scientists*

**From the first woman Nobel Peace Prize recipient, Bertha von Suttner (1905), to the latest and youngest female Nobel laureate, Malala Yousafzai (2014), this book in its**

**second edition provides a detailed look at the lives and accomplishments of each of these sixteen Prize winners. They did not expect recognition or fame for their work--economist Emily Greene Balch (1946) was surprised to learn that anyone knew about her. But they did not work in isolation: all met with discouragement, derision, threats or--in Yousafazi's case--attempted murder and exile. A history of the Prize and a biographical sketch of Alfred Nobel are included.**

**It's a scientific fact: Women rock! A charmingly illustrated and educational book, New York Times best seller Women in Science highlights the contributions of fifty notable women to the fields of science, technology, engineering, and mathematics (STEM) from the ancient to the modern world. Full of striking, singular art, this fascinating collection also contains infographics about relevant topics such as lab equipment, rates of women currently working in STEM fields, and an illustrated scientific glossary. The trailblazing women profiled include well-known figures like primatologist Jane Goodall, as well as lesser-known pioneers such as Katherine Johnson, the African-American physicist and mathematician who calculated the trajectory of the 1969 Apollo**

**11 mission to the moon. Women in Science celebrates the achievements of the intrepid women who have paved the way for the next generation of female engineers, biologists, mathematicians, doctors, astronauts, physicists, and more! — BrainPickings - Best Science Books of the Year**

**In 1989 Michael Bishop and Harold Varmus were awarded the Nobel Prize for their discovery that normal genes under certain conditions can cause cancer. In this book, Bishop tells us how he and Varmus made their momentous discovery. More than a lively account of the making of a brilliant scientist, How to Win the Nobel Prize is also a broader narrative combining two major and intertwined strands of medical history: the long and ongoing struggles to control infectious diseases and to find and attack the causes of cancer. Alongside his own story, that of a youthful humanist evolving into an ambivalent medical student, an accidental microbiologist, and finally a world-class researcher, Bishop gives us a fast-paced and engrossing tale of the microbe hunters. It is a narrative enlivened by vivid anecdotes about our deadliest microbial enemies--the Black Death, cholera, syphilis, tuberculosis, malaria, smallpox, HIV--and by biographical**

**sketches of the scientists who led the fight against these scourges. Bishop then provides an introduction for nonscientists to the molecular underpinnings of cancer and concludes with an analysis of many of today's most important science-related controversies--ranging from stem cell research to the attack on evolution to scientific misconduct. How to Win the Nobel Prize affords us the pleasure of hearing about science from a brilliant practitioner who is a humanist at heart. Bishop's perspective will be valued by anyone interested in biomedical research and in the past, present, and future of the battle against cancer. Table of Contents: List of Illustrations Preface 1. The Phone Call 2. Accidental Scientist 3. People and Pestilence 4. Opening the Black Box of Cancer 5. Paradoxical Strife Notes Credits Index**

**Reviews of this book: Despite his book's encouraging title, Bishop--who won a Nobel Prize in Physiology and Medicine in 1989--cautions that "I have not written an instruction manual for pursuit of the prize." Instead, he has written an amiable reflection on the experience of being a Nobelist, intertwined with some history and anecdotes about the award, and balanced by a wide-ranging review of his own career as an**

**"accidental scientist"...Along the way, Bishop reflects on the history of our knowledge of microbes, cancer, the politics of funding research and present-day disenchantment with science. His main purpose in writing this book, Bishop says, is to show that "scientists are supremely human"--which he does with grace and charm. --Publishers Weekly**

**Reviews of this book: How to Win the Nobel Prize is typical Bishop: modest, funny, insightful and offering an extremely clear and brief explanation of the basic scientific achievement that won the 1989 Nobel Prize in physiology or medicine for himself and longtime colleague, Harold Varmus, now president of the Memorial Sloan-Kettering Cancer Center. --David Perlman, San Francisco Chronicle**

**Reviews of this book: In these pages Bishop reveals himself as a good writer blessed with enviable clarity, someone sensible and levelheaded who likes people and is enamored of his science. --John Tyler Bonner, New York Times Book Review**

**Reviews of this book: This is a treasure...Above all, How to Win the Nobel Prize is a civilised book and a lavishly rewarding one. --Roy Herbert, New Scientist**

**Reviews of this book: At its heart this analysis of science and the scientific world is a jewel.**

**How to Win the Nobel Prize is an inspirational book, full of careful analysis and judgement.**

**--John Oxford, Times Higher Education**

**Supplement Reviews of this book: Bishop is a gifted communicator and teacher, and he sets about his task of educating scientists and the public by describing his career in science and science politics...In the end, Bishop's book provides a road map for scientists and the public to build a robust scientific community that serves our society well. --Andreas**

**Trumpp and Daniel Kalman, Nature Cell Biology J. Michael Bishop has written his book 'to show that scientists are supremely human.' The book is also a lucid explanation of how science has been harnessed to fight the human afflictions of cancer and infectious disease. And the story ends with a wide-ranging overview of today's challenges to the scientific enterprise. Overall, a must-read for all those interested in science and scientists--even those with absolutely no interest in winning a Nobel Prize! --Bruce Alberts, President, National Academy of Sciences J. Michael Bishop is that rare scientist who is widely read in literature and poetry. Most importantly, he remembers what he reads and thinks deeply about it, as well as about all else in his rich life. The Nobel Prize**

**he won and richly deserved, his political activism, his understanding of cancer and microbiology, his devotion to the practice of science--all these provide fodder for his writerly craft. Quite a wonderful book! --David Baltimore, Nobel Laureate and President, California Institute of Technology**

**A charmingly illustrated gift book profiling 50 famous women scientists from the ancient Greek mathematician, philosopher, and astronomer, Hypatia, to Marie Curie, a physicist and chemist. A recent U.S.**

**Department of Education survey found that high school girls take the same number of math and science classes as boys and earn slightly higher grades, but only 15 percent of U.S. collegiate women major in science, technology, engineering, and mathematics (STEM) fields. Encouraging young women and girls to pursue STEM career tracks has never been more important. Women in Science highlights notable women's contributions to various scientific fields and inspires readers both young and old. A fascinating collection full of striking, singular art, the book features 50 profiles and illustrated portraits of women in STEM from the ancient to the modern world, and also contains infographics about interesting and relevant topics such as lab**

**equipment and rates of women currently working in STEM fields. Profiles feature well-known figures, such as biologist Rachel Carson and primatologist Jane Goodall, as well as lesser-known pioneers, such as Dr. Patricia Bath, the first African-American woman to receive a medical patent, and Barbara McClintock, a Nobel Prize-winning cytogeneticist.**

**Women Nobel Peace Prize Winners, 2d ed.  
Nobel Prize Laureates**

## **10 Women Who Changed Science and the World**

### **Nobel Prize Winner in Physiology and Medicine**

### **Nobel Prizes and Nature's Surprises**

Presents the electronic version of the book which describes the lives and achievements of fifteen women who either won Nobel Prizes or contributed to a winning project.

Each year the Nobel Prizes in the natural sciences reveal amazing discoveries. New milestones in the relentless advance of science are identified. The growth of knowledge and its evolution can be researched in the Nobel archives where nominations are kept secret for 50 years after the awards have been made. They represent a treasure for real-time assessment of science. Norrby's earlier book, Nobel

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Prizes and Life Sciences (2010) examined the unique archival records until 1959. The present book takes us up to 1962, surveying a range of dazzling discoveries. All prizes in immunology are reviewed. Their impact on our capacity to control infectious diseases and transplant organs are highlighted. The Nobel year 1962 is exceptional in recognizing the most major advance in biology since Darwin in 1859 presented his theory of evolution. This was the dramatic discovery of the double-helix structure of DNA by Watson and Crick in 1953. The era of molecular biology had begun. Its explosive development continues into the present. Contents: A Magician of Virology from Australia A Divided Nobel Prize and a New Era in Immunology More Nobel Prizes in Immunology Immunity, Infections and Transplantations Transgressing Borders in Science and Scenes of Life Making Sense of Hearing Unraveling the Complexity of Protein Folding "It's So Beautiful, You See, So Beautiful" Coda Readership: General. Keywords: DNA; Nobel Prize; Life Science; Medical Discoveries; Molecular Biology Reviews: "This book describes and explains one of the most important discoveries of the 20th century. It is a seminal work, that scholars of the History of Science will use to be able to understand how science evolves. Young scientists will find this book a valuable resource." Sir Aaron Klug Nobel laureate in Chemistry, 1982

"Speculation about what happens in the selection of Nobel Prize winners is part of both the narrative and the 'gossip' of science. Interpreting what went on in the Nobel selection committees 50 years ago requires both an intimate understanding of how the process works and familiarity with subtleties of the Swedish language. Erling Norrby has the proper personal experiences to make such evaluations. In the present, his second, book he mainly reviews Medical Nobel awards during 1960 and 1962. Coming as it does near the beginnings of the modern medicine — recognizing exceptional advances in immunology and molecular biology — this is a fascinating era for those who are intrigued by the history of discovery." Peter C Doherty Nobel laureate in Physiology or Medicine, 1996 "The moment the Nobel Foundation announces its Prizes in the sciences, decades of struggle and turmoil toward discovery enter the spotlight. To skillfully examine some of the most dramatic scientific advances in the middle of the twentieth century, Erling Norrby has reached deeply into the Nobel archives to examine firsthand how many of the most illustrious Prizes from that era came to be awarded. As a superb scientist, educator and administrator, Dr Norrby is able to tell these stories within the context of the scientific discoveries." Stanley B Prusiner Nobel laureate in Physiology or Medicine, 1997 — I particularly enjoyed Norrby's lengthy treatment of the

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1962 chemistry prize to James Watson, Francis Crick, and Maurice Wilkins, 1962 for their structural work on the structure of DNA. This well-referenced and copiously illustrated book, featuring meditations, poetry, quotations, and miscellaneous musings, is a true labour of love. I heartily recommend it to anyone interested in the history of scientific discovery, the personalities of those who pursue it, and how it actually happens and is received. Chemistry & Industry

A biography of the woman who used her understanding of chemistry to help develop medicines and who devoted her life to helping others.

Nobelpreis / Frau.

The Madame Curie Complex

Women Scientists

An Interactive Journal and Science Notebook with Quotes and Biographies of Women Who Won Jennifer Doudna, Gene Editing, and the Future of the Human Race

Inspired by the Discoveries of Nobel Prize Laureates in Physics, Chemistry and Medicine

History of Women in Science for Young People

The Nobel Prizes in natural sciences have achieved the reputation of being the ultimate accolade for scientific achievements. This book gives a unique insight into the selection of Nobel Prize recipients, in particular the life sciences. The evolving mechanisms of selection of prize

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recipients are illustrated by reference to archives, which have remained secret for 1) years. Many of the prizes subjected to particular evaluation concern awards given for discoveries in the field of infectious diseases and the interconnected field of genetics. The book illustrates the individuals and environments that are conducive to scientific creativity. Nowhere is this enigmatic activity'-- the mime mover in advancing the human condition highlighted as lucidly as by identification individuals worthy of Nobel Prizes. --Book Jacket.

Spanning the nineteenth and twentieth centuries, this fascinating history explores the lives and achievements of great women in science across the globe. *Ten Women Who Changed Science and the World* tells the stories of trailblazing women who made a historic impact on physics, biology, chemistry, astronomy, and medicine. Included in this volume are famous figures, such as two-time Nobel Prize winner Marie Curie, as well as individuals whose names will be new to many, though their breakthroughs were no less remarkable. These women overcame significant obstacles, discrimination, and personal tragedies in their pursuit of scientific advancement. They persevered in their research, whether creating life-saving drugs or expanding our knowledge of the cosmos. By daring to ask ' How? ' and ' Why? ', each of these women made a positive impact on the world we live in today. In this book, you will learn about:

Astronomy Henrietta Leavitt (United States, 1868 – 1921) discovered the period-luminosity relationship for Cepheid

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variable stars, which enabled us to measure the size of our galaxy and the universe. Physics Lise Meitner (Austria, 1878 – 1968) fled Nazi Germany in 1938, taking with her the experimental results which showed that she and Otto Hahn had split the nucleus and discovered nuclear fission. Chien-Shiung Wu (United States, 1912 – 1997) demonstrated that the widely accepted ‘ law of parity ’ , which stated that left-spinning and right-spinning subatomic particles would behave identically, was wrong. Chemistry Marie Curie (France, 1867 – 1934) became the only person in history to have won Nobel prizes in two different fields of science. Dorothy Crowfoot Hodgkin (United Kingdom, 1910 – 1994) won the Nobel Prize for Chemistry in 1964 and pioneered the X-ray study of large molecules of biochemical importance. Medicine Virginia Apgar (United States, 1909 – 1974) invented the Apgar score, used to quickly assess the health of newborn babies. Gertrude Elion (United States, 1918 – 1999) won the Nobel Prize for Physiology or Medicine in 1988 for her advances in drug development. Biology Rita Levi-Montalcini (Italy, 1909 – 2012) won the Nobel Prize for Physiology or Medicine in 1986 for her co-discovery in 1954 of Nerve Growth Factor (NGF). Elsie Widdowson (United Kingdom, 1906 – 2000) pioneered the science of nutrition and helped devise the World War II food-rationing program. Rachel Carson (United States, 1907 – 1964) forged the environmental movement, most famously with her influential book *Silent Spring*.

A prismatic look at the meeting of Marie Curie and Albert

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Einstein and the impact these two pillars of science had on the world of physics, which was in turmoil. In 1911, some of the greatest minds in science convened at the First Solvay Conference in Physics, a meeting like no other. Almost half of the attendees had won or would go on to win the Nobel Prize. Over the course of those few days, these minds began to realize that classical physics was about to give way to quantum theory, a seismic shift in our history and how we understand not just our world, but the universe. At the center of this meeting were Marie Curie and a young Albert Einstein. In the years preceding, Curie had faced the death of her husband and soul mate, Pierre. She was on the cusp of being awarded her second Nobel Prize, but scandal erupted all around her when the French press revealed that she was having an affair with a fellow scientist, Paul Langevin. The subject of vicious misogynist and xenophobic attacks in the French press, Curie found herself in a storm that threatened her scientific legacy. Albert Einstein proved an supporter in her travails. They had an instant connection at Solvay. He was young and already showing flourishes of his enormous genius. Curie had been responsible for one of the greatest discoveries in modern science (radioactivity) but still faced resistance and scorn. Einstein recognized this grave injustice, and their mutual admiration and respect, borne out of this, their first meeting, would go on to serve them in their paths forward to making history. Curie and Einstein come alive as the complex people they were in the pages of *The Soul of Genius*. Utilizing never before

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seen correspondance and notes, Jeffrey Orens reveals the human side of these brilliant scientists, one who pushed boundaries and demanded equality in a man ' s world, no matter the cost, and the other, who was destined to become synonymous with genius.

Peter Doherty recounts his unlikely path to becoming a Nobel Laureate, revealing how his nonconformist upbringing, sense of being an outsider, and search for a different perspective have shaped his life and work.

Beginning with his humble origins in Australia, Doherty shares his early interests and describes his award-winning, influential work with Rolf Zinkernagel on T-cells and the nature of immune defense. In prose that is amusing and astute, Doherty offers a rare insider's look at the realities of being a research scientist. He lucidly explains his own scientific work and the selection, funding, and organization of research projects; the major problems science hopes to solve; and the rewards of a career in scientific research. For Doherty, science plays an important role in improving the world, and he argues that scientists need to do a better job of making their work more accessible to the public. He concludes with tips on how to win a Nobel Prize, including advice on being persistent, generous, and culturally aware.

Forgotten Women: The Leaders

50 Fearless Pioneers Who Changed the World

Zebrafish

The Telomere Effect

The Lady Laureates

# Bookmark File PDF Nobel Prize Women In Science Their Lives Struggles And Momentous Discoveries Sharon Bertsch Mcgrayne Forces of Nature

Calling all future Nobel Prize winners! This interactive journal will inspire you to greatness with motivational quotes and short biographies of women who won a Nobel Prize in science (see list below). Plus you'll have plenty of worksheets, including: Science writing prompts Blank sketch pages for a nature journal Lined journal pages for nature observations Quad graph pages Isometric grid pages Hex grid pages Dot grid pages Each section includes detailed instructions on how to graph data, sketch organic molecules, record your nature observations, draft your inventions, and log your experiments - a complete Scientist's Notebook!

Women scientist biographies included: Marie Curie (1867-1934)

Nobel Prize in Physics 1903 and in Chemistry 1911 Irène Joliot-Curie (1897 -1956) Nobel Prize in Chemistry 1935 Gerty Theresa Cori (1896 -1957) Nobel Prize in Physiology or Medicine 1947

Maria Goeppert Mayer (1906-1972) Nobel Prize in Physics 1963

Dorothy Crowfoot Hodgkin (1910-1994) Nobel Prize in Chemistry

1964 Rosalyn Sussman Yalow (1921- 2011) Nobel Prize in

Physiology or Medicine 1977 Ada E. Yonath (b. June 22, 1939)

Nobel Prize in Chemistry 2009 Here's a sample: Be Persistent -

Dorothy Crowfoot Hodgkin Dorothy Hodgkin was determined - she had to be. She spent many years searching out the elusive structure of insulin, a molecule which is vital to health. Along the way, she developed a new method for studying complex molecules. Yes, Dorothy won a Nobel Prize in Chemistry, but not for solving the problem she most cared about. It took another five years of work after winning the prize before she found the answer she'd long been searching for. You might even say, "She Persisted." (cont.) This workbook and journal makes a great gift for any young scientist or engineer, including girls, teens, and young adults. Appropriate for middle school, high school, community college, or university students. Perfect for homeschoolers, teachers, administrators, club leaders, and volunteers. For more helpful STEM resources visit

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www.STEM-INSPIRATIONS.com.

A Best Book of 2021 by Bloomberg BusinessWeek, Time, and The Washington Post The bestselling author of Leonardo da Vinci and Steve Jobs returns with a compelling (The Washington Post) account of how Nobel Prize winner Jennifer Doudna and her colleagues launched a revolution that will allow us to cure diseases, fend off viruses, and have healthier babies. When Jennifer Doudna was in sixth grade, she came home one day to find that her dad had left a paperback titled The Double Helix on her bed. She put it aside, thinking it was one of those detective tales she loved. When she read it on a rainy Saturday, she discovered she was right, in a way. As she sped through the pages, she became enthralled by the intense drama behind the competition to discover the code of life. Even though her high school counselor told her girls didn't become scientists, she decided she would. Driven by a passion to understand how nature works and to turn discoveries into inventions, she would help to make what the book's author, James Watson, told her was the most important biological advance since his codiscovery of the structure of DNA. She and her collaborators turned a curiosity of nature into an invention that will transform the human race: an easy-to-use tool that can edit DNA. Known as CRISPR, it opened a brave new world of medical miracles and moral questions. The development of CRISPR and the race to create vaccines for coronavirus will hasten our transition to the next great innovation revolution. The past half-century has been a digital age, based on the microchip, computer, and internet. Now we are entering a life-science revolution. Children who study digital coding will be joined by those who study genetic code. Should we use our new evolution-hacking powers to make us less susceptible to viruses? What a wonderful boon that would be! And what about preventing depression? Hmmm Should we allow parents, if they can afford it, to enhance the height or muscles or IQ of their kids? After helping to discover CRISPR, Doudna became a leader in wrestling with these moral issues and, with her collaborator Emmanuelle

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Charpentier, won the Nobel Prize in 2020. Her story is an "enthraling detective story" (Oprah Daily) that involves the most profound wonders of nature, from the origins of life to the future of our species.

This book is a companion to the IYC-2011 celebration. The eleven chapters are organized into three sections: Section 1: Marie Curie's Impact on Science and Society, Section 2: Women Chemists in the Past Two Centuries, and Section 3: Policy Implications. The authors invited to contribute to this book were asked to orient their chapter around a particular aspect of Marie Curie's life such as the ethical aspects of her research, women's role in research or her influence on the image of chemists. Our hope is that this book will positively influence young women's minds and decisions they make in learning of chemistry/science like Marie Curie's biography. But we do hope this book opens an avenue for young women to explore the possibility of being a scientist, or at least to appreciate chemistry as a human enterprise that has its merit in contributing to sustainability in our world. Also we hope that both men and women will realize that women are fully competent and capable of conducting creative and fascinating scientific research.

"A collection of profiles of some of history's most fascinating female scientists."--

A Revolutionary Approach to Living Younger, Healthier, Longer

A to Z of Women in Science and Math

An Unexpected Life in Science

Reflections, Challenges, and Breaking Boundaries

The Soul of Genius

Marie Curie

*Profiles the lives of fifteen women who have won the Nobel Prize in Science, including Marie Curie, Gertrude Elion, Rosalind Franklin, and Lise Meitner. Original. 20,000 first printing.*

*In 1895 Alfred Nobel rewrote his will and left his fortune made in dynamite and munitions to*

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*generations of thinkers. Since 1901 women have been honoured with Nobel Prizes for their scientific research twenty times, including Marie Curie twice. Spanning more than a century and ranging across the world, this inventive story collection is inspired by these women whose work has altered history and saved millions of lives. From a transformative visit to the Grand Canyon to a baby washing up on a Queensland beach, a climate protest during a Paris heatwave to Stockholm on the eve of the 1977 Nobel Prize ceremony, Ordinary Matter explores the nature of ingenuity and discovery, motherhood and sacrifice, illness and legacy. Sometimes the extraordinary pivots on the ordinary.*

*The zebrafish has become one of the most important model organisms to study biological processes in vivo. As a vertebrate that has many of the strengths of invertebrate model systems, it offers numerous advantages to researchers interested in many aspects of embryonic development, physiology and disease. The next few years will see the completion of large scale initiatives that exploit the zebrafish as a model system for the understanding of gene function in vertebrates, including the sequencing of the genome. The zebrafish will therefore play an increasingly important role in the future of biomedical research. Whole genome sequencing projects, such as the human genome project, have led to the isolation of tens of thousands of genes for which the in vivo function is unknown. It is therefore likely that an increasing number of researchers will turn to organisms such as the zebrafish to understand the in vivo requirement for the proteins these genes encode. Recent technical advances now allow the*

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*rapid testing of in vivo function of as yet uncharacterised genes in zebrafish in large numbers and at a speed that is impossible in other systems. This book not only provides a complete set of instructions that will allow researchers to establish the zebrafish in their laboratory. It also gives a broad overview of commonly used methods and a comprehensive collection of protocols describing the most powerful techniques.*

*Since 1901 there have been over three hundred recipients of the Nobel Prize in the sciences. Only ten of them "about 3 percent" have been women. Why? In this updated version of Nobel Prize Women in Science, Sharon Bertsch McGrayne explores the reasons for this astonishing disparity by examining the lives and achievements of fifteen women scientists who either won a Nobel Prize or played a crucial role in a Nobel Prize - winning project. The book reveals the relentless discrimination these women faced both as students and as researchers. Their success was due to the fact that they were passionately in love with science. The book begins with Marie Curie, the first woman to win the Nobel Prize in physics. Readers are then introduced to Christiane Nusslein-Volhard, Emmy Noether, Lise Meitner, Barbara McClintock, Chien-Shiung Wu, and Rosalind Franklin. These and other remarkable women portrayed here struggled against gender discrimination, raised families, and became political and religious leaders. They were mountain climbers, musicians, seamstresses, and gourmet cooks. Above all, they were strong, joyful women in love with discovery. Nobel Prize Women in Science is a startling and revealing look into the history of science and the*

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*critical and inspiring role that women have played in the drama of scientific progress.*

*Obsessive Genius*

*Radioactivity Pioneer and the First Woman to Win a Nobel Prize*

*Science and Me*

*The Inner World of Marie Curie*

*Their Lives, Struggles, and Momentous Discoveries: Second Edition*

*Trailblazers: 33 Women in Science Who Changed the World*

From the ancient world to the present women have been critical to the progress of science, yet their importance is overlooked, their stories lost, distorted, or actively suppressed. *Forces of Nature* sets the record straight and charts the fascinating history of women's discoveries in science. In the ancient and medieval world, women served as royal physicians and nurses, taught mathematics, studied the stars, and practiced midwifery. As natural philosophers, physicists, anatomists, and botanists, they were central to the great intellectual flourishing of the Scientific Revolution and the Enlightenment. More recently women have been crucially involved in the

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Manhattan Project, pioneering space missions and much more. Despite their record of illustrious achievements, even today very few women win Nobel Prizes in science. In this thoroughly researched, authoritative work, you will discover how women have navigated a male-dominated scientific culture – showing themselves to be pioneers and trailblazers, often without any recognition at all. Included in the book are the stories of: Hypatia of Alexandria, one of the earliest recorded female mathematicians Maria Cunitz who corrected errors in Kepler's work Emmy Noether who discovered fundamental laws of physics Vera Rubin one of the most influential astronomers of the twentieth century Jocelyn Bell Burnell who helped discover pulsars Reveals all the politics & personal agendas that dictate who has been awarded the Prize, & just as importantly, who has not. Published in conjunction with the 100th anniversary of the Prizes.

Nobel Prize Women in Science Their Lives, Struggles, and Momentous Discoveries Citadel Press

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The life of trailblazing physicist Mildred Dresselhaus, who expanded our understanding of the physical world. As a girl in New York City in the 1940s, Mildred “Millie” Dresselhaus was taught that there were only three career options open to women: secretary, nurse, or teacher. But sneaking into museums, purchasing three-cent copies of National Geographic, and devouring books on the history of science ignited in Dresselhaus (1930–2017) a passion for inquiry. In *Carbon Queen*, science writer Maia Weinstock describes how, with curiosity and drive, Dresselhaus defied expectations and forged a career as a pioneering scientist and engineer. Dresselhaus made highly influential discoveries about the properties of carbon and other materials and helped reshape our world in countless ways—from electronics to aviation to medicine to energy. She was also a trailblazer for women in STEM and a beloved educator, mentor, and colleague. Her path wasn’t easy. Dresselhaus’s Bronx childhood was impoverished. Her graduate adviser felt educating women was a waste of time.

But Dresselhaus persisted, finding mentors in Nobel Prize-winning physicists Rosalyn Yalow and Enrico Fermi. Eventually, Dresselhaus became one of the first female professors at MIT, where she would spend nearly six decades. Weinstock explores the basics of Dresselhaus's work in carbon nanoscience accessibly and engagingly, describing how she identified key properties of carbon forms, including graphite, buckyballs, nanotubes, and graphene, leading to applications that range from lighter, stronger aircraft to more energy-efficient and flexible electronics.

Their Lives, Struggles, and Momentous Discoveries

Ordinary Matter

How to Win the Nobel Prize

Stem-Inspirations - How to Become a Nobel Prize Winner

Carbon Queen

Marie Curie, Albert Einstein, and the Meeting that Changed the Course of Science