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Katalin Karikó appeared on the scene at a critical phase of the COVID-19 pandemic. Karikó, along with Drew Weismann, received the Nobel Prize in Medicine in 2023 for discoveries that enabled the development of effective mRNA vaccines against Covid-19. The autobiography of Katalin Karikó was written, translated, and published before the Nobel Prize was conferred in December 2023. Consequently, her life presented in both the English and Hungarian versions remains a career under construction, a work in progress. It is a phenomenal life, filled with challenges, struggles, endurance and faith in her own destiny as a scientist. This life is presented to us in a beautiful, direct and almost conversational but very personal style. It is a pleasure to read, nay an adventure.

Katalin Karikó's autobiography makes the world of scientific research accessible to non-specialists and at the same time presents the career of an extraordinary scientist in a modest, almost self-effacing way. It is also a tableau of the Hungarian countryside of the 1960s, a flashback to university life in the 1970s and academic life in Hungary, and then a tale of a long and difficult research career in the U.S.A. Added to all of this, as a backdrop, is the story of Karikó's family from which an exceptional personality emerges, a person who becomes at the same time a very familiar ordinary figure for the reader.

The book chapters follow Katalin's life from her childhood to the recognition of her scientific discoveries – an arrangement that reminds one of almost a folktale pattern – but the chapters are preceded by two short and highly emotional reflections. The first is a memory of Karikó's daughter writing a letter of thanks to her teacher on her final day of second grade, when Karikó was confronted with the fact that she had never thanked her teachers. This preface thanks all of her mentors from the first years of her self-awareness to the world-famous masters who have all planted seeds of knowledge and curiosity. The second reflection is addressed to the reader: it is a scene with a woman sitting at a lab bench for hours that stretch into forty years. The mysteries are hidden from the reader because they take place inside the cells, and the woman is like Lieutenant Columbo – a leitmotiv of the whole book – investigating and asking questions to find answers and results. The scene is an invitation to an unseen world, that of cells, which contains the complexity of life.

In a flashback Karikó introduces herself as "A Butcher's Daughter" (Chapter title) and evokes a childhood of modest conditions with supportive parents, but many difficulties. Her father had taken part in the events of the Hungarian Revolution of 1956 (Katalin was born

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in 1955) in their hometown, Kisújszállás. He was arrested right after the communist regime regained power and was sentenced to seven months in prison. By describing this and her studies, Karikó provides a glimpse into the life of the whole community: she commemorates a former world, an older way of life. She highlights a decisive reading, which helped her to articulate her vocation in scientific research: the book of János (Hans) Selye, a pioneering chemist and endocrinologist of Hungarian descent. Selye's *The Stress of Life* (1956, in Hungarian:1964), defined a previously unknown phenomenon that fundamentally reshaped thinking about the human nervous system. According to Selye, one must be blessed and cursed with a deep love for, and an uncontrollable curiosity about Nature's secrets, to spend a lifetime doing research. As her inspiration Karikó refers to Selye and Albert Szentgyörgyi, but also her teachers in Kisújszállás and her colleagues at Szeged as spurs to her scientific commitments.

To help the reader understand her research, she takes the reader through "An Extremely Brief Interlude of Science" (chapter title), in which Karikó summarizes what science knew about DNA in the 1960s, the years of her childhood when she was standing in line with her kindergarten classmates as they waited for their polio vaccine. She explains how biologists observed the process of genetic expression, but they did not understand how it occurred – until the discovery of mRNA in 1960 explained it, and prompted Karikó to become "blessed and cursed" with research as an adult. By introducing the reader to the world of genes, amino acids, and nucleosides, she also reveals her own way of thinking.

In the section „A Sense of Purpose" (Chapter title), she includes her Szeged university years and becoming a young researcher, while also presenting the reader with the mysterious world of the mRNA from two perspectives: a personal perspective, and the impersonal, but larger perspective of Hungarian academic life in the 1970s. Young Karikó's vocation is increasingly focused on the potentials of mRNA in medicine and, at the same time, the boundaries and difficulties of a researcher's life. While positive events occur in Karikó's private life (her marriage and the birth of her daughter), the funding of her biological-research post is terminated. She had to make a decision: to continue her determined work, she had to leave Hungary in the middle of the 1980s, in an era when the unity of the Eastern Bloc was weakening.

In the following sections of her book: "An Outsider in the System" and "Susan's Mom," she looks back on the decades spent in the United States. Her sense of purpose and the persistence in a well-defined research topic did not result in quick success. She had to overcome many obstacles and personal jealousies. Karikó's ideas and the countless experiments took a lot of time and the outcome was never predictable, which caused several difficulties in financing her research programs. However, this was the period when her daughter was growing up, while the family had to overcome linguistic and cultural barriers. As a mother, Katalin invites the reader to follow how her daughter Susan's endurance and talent earned her two gold medals in women's eight rowing at the London Olympics.

Karikó Katalin's final section titled "A Changed World" relates to the recent past in which several radical changes took place in her professional life and the field of medicine. In 2013 Karikó joined the biotech industry where, for the first time in her life, she did not have to try to convince people about mRNA's potential. But even from that turning point, the road to the mass production of the Covid-19 vaccines was not short: it was the urgency of the pandemic that finally unlocked the potential for this preventive measure.

All in all, Karikó's summary of her career, with supporters and research fellows, but in many cases having to sail against the wind led to the final breakthrough in this part of medical science. Her autobiography opens a window to an exceptional rendering at the turn of the century's Hungarian and American private, social, and scientific life with her wise and emotive tone by showing the human face of science. This is the most significant result of the book: presenting the unseen aspects of scientific research by documenting a specific career in biology and mRNA studies. It is at the same time a wonderful example of a person's determination, commitment, and know-how to overcome obstacles and finally achieve a "breakthrough." It is an example for life that we should recommend as required reading for all our friends, but particularly our children, the next generation!