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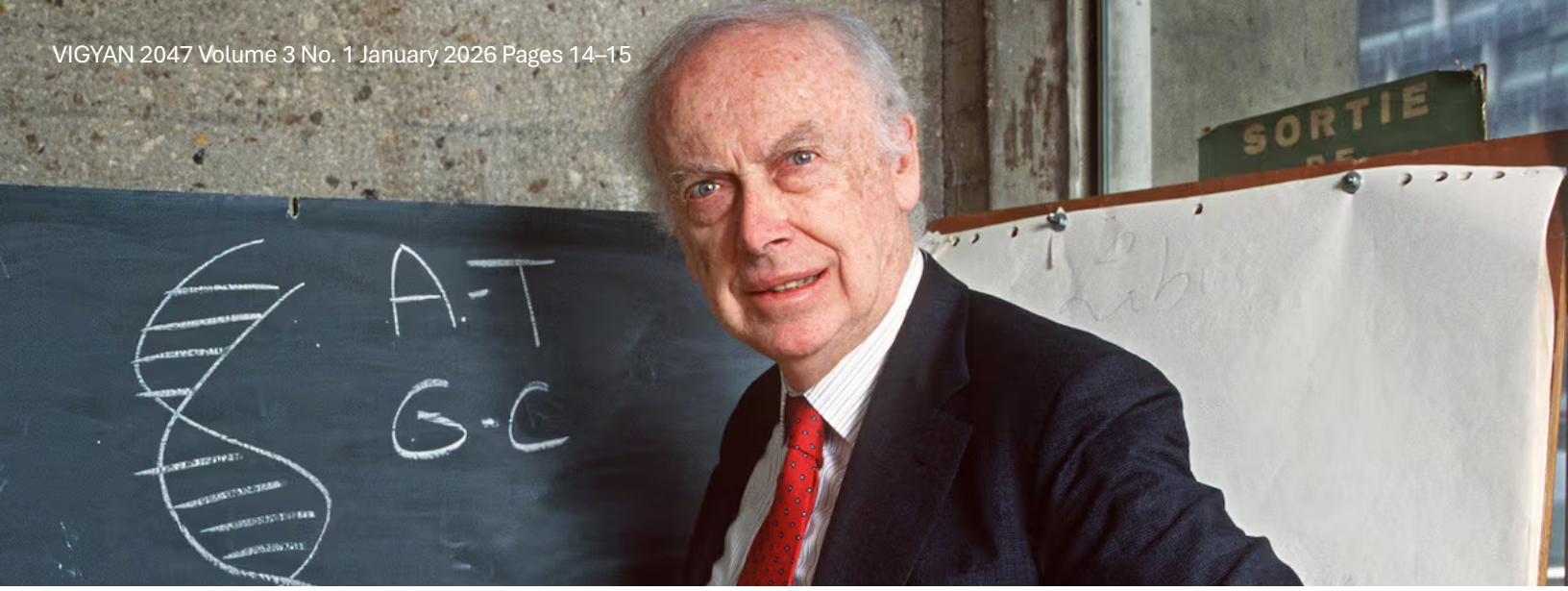

James Dewey Watson
The Brilliant Mind the World May Choose to Forget

Partha Pratim Majumder

Edward O. Wilson, the legendary father of sociobiology, once described him as “the most unpleasant human being I had ever met.” He later became the first living Nobel laureate to auction his Nobel Prize medal. Reflecting bitterly on his fate, he admitted that because of some of his controversial views and outspoken beliefs, he had virtually turned into an “unperson.” In his own words, “No one really wants to admit I exist.” He lamented that being perceived as an “unperson” led to his removal from several corporate boards, leaving him with no financial sustenance other than his academic income. This “unperson” was none other than James Dewey Watson, one of the towering figures of the twentieth-century science. Watson received the Nobel Prize at the remarkably young age of 34, based on research he had published in 1953 when he was just 25. His historic 1953 paper in Nature, co-authored with Francis Crick, ended with one of the most legendary understatements in the hisotory of science: “It has not escaped our notice that the specific pairing we have postulated immediately suggests a possible copying mechanism for the genetic material.” Watson passed away on 6 November 2025 at the age of 97.

Almost everyone in the world today knows that Watson, along with Francis Crick, Maurice Wilkins and Rosalind Franklin, helped unravel what they famously called “the secret of life”: DNA, the molecule present in every cell of every living organism. Within just a few decades of its discovery—and tragically, without Rosalind Franklin witnessing its full glory as she died of ovarian cancer barely five years later—the structure of DNA profoundly reshaped an astonishingly wide range of disciplines, including biology, evolutionary theory, medicine, archaeology, and forensic science. Watson and Crick revealed that DNA consists of two intertwined strands shaped like a slightly twisted ladder, a “double helix.” The steps of this ladder could unzip to replicate themselves—an elegant mechanism that explained how genetic information is copied and preserved across generations. This single discovery revolutionized life sciences and laid the foundation of modern genetics and biotechnology.

Watson himself was always a young man in a great hurry. He joined the University of Chicago to study zoology at just 15 and soon developed a deep interest in genetics. He earned his PhD from Indiana University under Salvador Luria, a leading microbiologist and a Nobel laureate himself. By then, Watson had become convinced that genes were not composed of proteins, as many scientists believed at the time, but were instead made of DNA. In 1951, during a symposium in Naples, he saw an X-ray diffraction photograph of DNA shown by Maurice Wilkins, and his conviction that genes were made of nucleic acids became unshakeable. Determined to understand the structural chemistry of DNA rather than remain confined to bacterial biochemistry or virology, Watson later wrote that he simply could not force out of his mind “a potential key to the secret of life.” Ambition drove him: it was, as he said, “certainly better to

imagine myself becoming famous than maturing into a stifled academic who had never risked a thought."

Watson aspired to go to Cambridge University to work in structural chemistry. With the support of his mentor Luria, he secured a position at the Cavendish Laboratory as a research assistant, initially studying the myoglobin protein under John Kendrew. However, once at Cavendish, he was assigned to share an office with Francis Crick, who also shared his firm belief that genes must be made of DNA. At the 1962 Nobel ceremony, Watson would later recall that almost immediately on entering the Cavendish, he realized his destiny lay with Crick rather than with Kendrew's work. "With Francis to talk to," he said, "my fate was sealed." Their collaboration led to the publication of their DNA model in Nature in 1953—a paper that changed biological thinking forever. Watson later admitted that even he could not have foreseen "the explosive impact of the double helix on science and society."

After 1953, Watson worked on X-ray diffraction studies of RNA at Caltech, then returned to Cavendish to collaborate again with Crick on the structural principles of viruses. Later, at Harvard University, he worked on understanding RNA's crucial role in protein synthesis, helping shape the emerging field of molecular biology. In 1968, he was invited to lead the Cold Spring Harbor Laboratory (CSHL) in New York. Although not known initially as an administrator, Watson demonstrated extraordinary ability to raise funds and transform CSHL into one of the world's leading centres of biological research. Under his stewardship, the once-struggling institution became a premier site for breakthroughs in cancer genomics, molecular and cellular biology, plant molecular biology and neuroscience. CSHL also became famous for its influential scientific meetings and advanced training courses, playing a key global role in DNA science. The author recalls being privileged to attend a meeting on human genome diversity in 1997 at CSHL, where Watson personally interacted with participants and even hosted them at his home—a vivid personal memory.

In the late 1980s, as genome scientists began dreaming of sequencing the entire human genome—three billion nucleotides across 23 chromosomes—many dismissed the idea as fantasy. But in 1990, Watson was appointed leader of the monumental Human Genome Project. At that time, DNA sequencing was slow, expensive and technically challenging, making the effort one of the boldest scientific enterprises in history. Watson's willingness to take on such an extraordinary challenge reaffirmed his fearless scientific spirit. However, he resigned in 1994 following strong disagreements with the Director of the U.S. National Institutes of Health. Watson believed firmly that the genomic information must remain a public good and not be restricted through patents or commercial exploitation—a position that later shaped international norms regarding open scientific data. The NIH Director disagreed, insisting on patenting opportunities, leading to Watson's exit.

He then became President of CSHL in 1994. Around this time, he read The Bell Curve, a highly controversial book on intelligence and social hierarchy. Nathaniel Comfort, who is writing a biography of Watson, has said that Watson's acceptance of the book's arguments marked the point where he "lost his scientific critical edge." In 2007, Watson made deeply offensive remarks to The Sunday Times, stating he was pessimistic about Africa's prospects because "all our social policies are based on the fact that their intelligence is the same as ours—whereas all the testing says not really." Though he apologized, acknowledging there was no scientific basis for his comments, he was removed from his role as Chancellor of CSHL. Named Chancellor Emeritus, he eventually lost that title as well after a 2019 PBS interview in which he reaffirmed his discredited views, insisting that racial differences in IQ were genetic rather than socio-historical in origin. Francis Collins, a leader of the Human Genome Project and of many other global genetics initiatives, condemned the remarks as profoundly misguided and hurtful. Comfort later observed that Watson's greatest flaw was "overbelieving in the power of DNA"—a kind of genetic determinism that overshadowed his judgment. Thus, Watson emerged as perhaps the most celebrated scientist of the 20th century, and simultaneously one of the most controversial and infamous pesons of the 21st.

Beyond the science, Watson's life remains a study in complexity: a brilliant mind whose discoveries reshaped humanity's understanding of life itself, yet whose later views isolated him socially, professionally, and morally. His story continues to provoke reflection on the responsibilities that accompany scientific genius, the ethics of leadership in science, and the enduring necessity of humility when wielding knowledge as powerful as the human genome. ◆

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Prof Partha Pratim Majumder *is an internationally renowned scientist and science administrator. He's also been the National Science Chair, Science & Engineering Board, Government of India. He can be reached through parmaj2023@gmail.com*