

# The Art and Politics of Science

Harold Varmus (2009). New York: W.W. Norton & Co, 256 pp., US\$24.95. ISBN-10: 0393061280, ISBN-13: 978-0393061284.

Reviewed by Dorret Boomsma

Harold Varmus was awarded the Nobel Prize, which he shared with Mike Bishop, in Physiology or Medicine 1989 for his discovery of the cellular origin of retroviral oncogenes. In his new book he reflects upon his career, which did not begin in medical school, but in philosophy and English literature. Following graduation from Amherst, a fellowship enabled him to do a PhD in English literature at Harvard University. However, after a year, he switched to medical school with strong interests in psychiatry and international health.

Varmus's book is not a full autobiography; in four parts he writes about becoming a scientist, his work on oncogenes, his career as an NIH director and, in the last part of the book, about issues that are somewhat controversial, like stem-cell research. The first and second parts are highly illuminating about establishing a successful career in science. Repeatedly, Varmus talks about the prolonged adolescence he was permitted, allowing for 'ambivalence and indecision' when starting out as an undergraduate and graduate student, and about

how in the 1970s and 1980s there never was much trouble finding financial support for research activities. One cannot help comparing this happy state of affairs to the current scientific environment and wonder if, for example, there isn't too much emphasis on early high performance in graduate school, and even before. Varmus himself notes that currently the success rates for grants are so low that they create an unprecedented sense of stress, especially for young investigators. The second part of the book gives a wonderful overview of the work that led to the 1989 Nobel Prize. Varmus proudly notices that the prize did not precipitate a decline in his productivity, as has been described by Harriet Zuckerman for other Nobel Prize winners.

In 1993, Varmus went from being an academic scientist to a political one when President Clinton asked him to become director of the National Institutes of Health. He was at the NIH for 6 years and then became president of the Memorial Sloan-Kettering Cancer Center, a position he still

holds. In contrast to Parts 1 and 2 of the book, Part 3 — about the translation of scientific work into public service — is somewhat less satisfactory. Varmus was required to transform himself in a relatively short time from a scientist who ran a lab, with about 25 members, and taught students, into a leader of a large federal agency, with nearly 20,000 employees and 30,000 grant recipients. His own research budget had never been over a \$1 million, the NIH budget at the time was just under \$11 billion dollars. To learn about the successful transition would have been particularly interesting, but we learn relatively little of this aspect in his career shift.

In the final pages of the book Varmus reviews stem cell research, global health (he worked in India for a few months as a medical student) and scientific publishing, with a focus on the discussions about open-access journals. *The Art and Politics of Science* is a very good read that stresses throughout the importance and joy of being a member of the scientific community.