



# PAUL DE KRUIF: A MAN OF SCIENCE ... A MAN OF LETTERS

It was, arguably, one of those great, bristling, energizing, explosive times to be alive: When Paul de Kruif (Ph.D. 1916) arrived at Michigan in 1912, bacteriology — the field he studied — and the germ theory of disease were revolutionizing medical science and practice, much the way the fields of genetics and proteomics are today. Globally, the winds of war would gather over the decade, taking de Kruif himself to Army service in France where he rose in rank from first lieutenant to captain. And freedom flourished in literature and journalism that dared confront the reality behind the American façade, as works like Sinclair Lewis' *Main Street* broke new literary ground.

De Kruif (rhymes with “life”) returned to Ann Arbor after World War I to work with bacteriologist Frederick Novy, but in 1920 joined the Rockefeller Institute for Medical Research (now Rockefeller University) in New York City where he was assigned to a study of pathogenic bacteria and the causes of respiratory infection. As Howard Markel (M.D. 1986), Ph.D., George E. Wantz Professor and director of the U-M Center for the History of Medicine, writes in his article “Prescribing Arrowsmith,” de Kruif, in just two years, “was fired by the Rockefeller’s director, Simon Flexner, for writing a four-part series of articles on the medical profession entitled ‘Our Medicine Men,’ published in *The Century* magazine.” Though de Kruif’s contribution was anonymous, his authorship of the scathing assessment of medicine in 1920s America as a “mélange of religious ritual, more or less accurate folklore, and commercial cunning” devoid of “a scientific approach to disease prevention and treatment” was found out.

The unemployed bacteriologist was introduced to Sinclair Lewis, and de Kruif, Markel writes, “was officially at liberty to give up the dull drudgery of late nights in the laboratory for what he perceived to be the exciting life of a medical journalist.” Lewis and de Kruif agreed to collaborate on a medical novel.

“Within weeks,” according to Markel, “the two sold the book to Lewis’s publishers Harcourt and Brace and booked passage on a steamship to the West Indies where they could work without distractions.” *Arrowsmith* was published in 1925 with Sinclair Lewis listed as sole author, though Lewis had told Harcourt and Brace before finishing the novel, “There’s a question as to whether [de Kruif] won’t have contributed more than I shall have.”

Indeed Markel writes, “De Kruif was essential to the novel. Nearly all the scientists, physicians, and medical institutions portrayed in *Arrowsmith* were drawn from his experience as a graduate student at the University of Michigan and, later, as a research investigator at the Rockefeller Institute ... Martin [Arrowsmith] comes under the spell of an immunology professor named Max Gottlieb, who is an amalgam of de Kruif’s mentor at Michigan, the professor of bacteriology Frederick Novy, and his idol at the Rockefeller, biologist Jacques Loeb.”

*Arrowsmith* won the Pulitzer Prize in 1925, but Lewis turned it down saying he didn’t believe in such awards. Though de Kruif was complicit in not being listed as co-author in order to preserve the book’s sales (in which he held a 25 percent stake), he nonetheless decried in his memoirs, *The Sweeping Wind*, the “brief word of thanks in the acknowledgements for ‘technical assistance.’”

De Kruif went on in 1926 to write one of the best-selling and most widely read science books of all time. *Microbe Hunters* has been translated into 18 languages and was the first book with a totally scientific theme to sell over a million copies. At least two Hollywood movies and a Broadway play were based on *Microbe Hunters*, which is credited with inspiring an entire generation of biological scientists to take up careers in research. The book, which describes the work of Leeuwenhoek, Spallanzani, Pasteur, Koch and others, is still in print and available from Amazon.com, where it continues to attract rave reviews for a timeless relevance that prompted one reviewer to enthuse:

“From the top of today’s news, where reports of Ebola and HIV loom large, comes the story of microbes, bacteria, and how disease shapes our everyday lives. The superheroes in this scheme are the scientists, bacteriologists, doctors and medical technicians who wage active war against bacteria. The new introduction to this book places this history in a thoroughly modern context.”

*Microbe Hunters* was de Kruif’s most successful and enduring work, and it earned him recognition as “America’s first great science writer.” He continued writing books and magazine articles and, late in life, moved to Holland, Michigan, where he died in 1971, leaving behind an impressive body of work and what is undoubtedly one of the U-M Medical School’s most colorful stories. 

—RK

Howard Markel’s “Prescribing Arrowsmith” appeared in *The New York Times Book Review* on September 28, 2000.

John Barton contributed to this article.