

FORSCHUNGSKOLLOQUIUM ZUR WISSENSCHAFTSGESCHICHTE

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(Princeton/Berlin)

Recipes for Recombining DNA

A History of *Molecular Cloning: A Laboratory Manual*

In the history of modern science, laboratory instructions and recipes have often been edited into books with a wide circulation. Even in the late twentieth century, publications of this nature remained influential. For example, protocols from a 1980 summer course on gene cloning at Cold Spring Harbor Laboratory provided the basis for a best-selling laboratory manual by Tom Maniatis, Ed Fritsch, and Joe Sambrook. Not only did the *Molecular Cloning: A Laboratory Manual* become a standard reference for molecular biologists (commonly called the "Bible"), but also its recipes and clear instructions made gene cloning and recombinant DNA technologies accessible to non-specialists. Consequently, this laboratory manual contributed to the rapid spread of genetic engineering techniques throughout the life sciences, as well as in industry. As is often the case with how-to books, however, finding a way to update methods in this rapidly-changing field posed a challenge, and various molecular biology reference books had different ways of dealing with knowledge obsolescence. This paper explores the origins of this manual, its publication history, its reception, and its rivals – as well as the more recent migration of such laboratory manuals to the internet.

Prof. Dr. Angela N. H. Creager is the Thomas M. Siebel Professor in the History of Science at Princeton University, where she teaches in the Department of History and advises graduate students through the Program in History of Science. She earned her PhD in biochemistry at University of California, Berkeley, where she developed an interest in the history of science. Since then, her work has focused on twentieth-century biomedical research, with a particular focus on its experimental materials and infrastructure. She is author of two books, *The Life of a Virus: Tobacco Mosaic Virus as an Experimental Model, 1930–1965* (2002), and *Life Atomic: A History of Radioisotopes in Science and Medicine* (2013), which won the American Philosophical Society's Patrick Suppes Prize in the History of Science. More recently, she co-edited *Learning by the Book: Manuals and Handbooks in the History of Science* with Mathias Grote and Elaine Leong; it is being published as volume 5 of the BJHS serial *Themes* later this year.

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