

## Women and the LINC to Modern Computer Technology April 9, 2019

**Clark, Wesley A., "The LINC was Early and Small,"**

*1986 Proc. ACM Conf. on the History of Personal Workstations*, Jan. 9-10, 1986, ACM, New York, pp. 133-155.

Available at <https://dl.acm.org/citation.cfm?id=12187>.

Clark, who designed the LINC, gives us a lively, personal, and somewhat irreverent description of that history, including the LINC's immediate forebears, the TX-O, ARC-I and L-I, all of which were also designed by Clark.

Summary: *The LINC represents one of the earliest attempts to put the stored program computer into the form of a general instrument for laboratory use. In a deliberate departure from the technology of Timesharing then just beginning nearly two decades of development, the LINC was designed for use by individual experimenters and thus anticipated features of the modern personal computer and personal workstation. .... Of course the LINC in its day was neither personal computer nor personal workstation but simply the LINC.*

**November, Joseph, Biomedical Computing: Digitizing Life in the United States,**  
The Johns Hopkins University Press, 2012

November is an Associate Prof. at U. SC. If you are interested in what makes a technological revolution, all the threads come together in this book.

Abstract: *Computers and biomedical research are now so intimately connected that it is difficult to imagine when such critical work was offline. Biomedical Computing transports readers back to such a time and investigates how computers first appeared in the research lab and doctor's office. November examines the conditions that made possible the computerization of biology—including strong technological, institutional, and political support from the National Institutes of Health—and shows not only how digital technology transformed the life sciences but also how the intersection of the two led to important developments in computer architecture and software design.*

*The history of this phenomenon has been only vaguely understood. November's thoroughly researched and lively study makes clear for readers the motives behind computerizing the study of life and how that technology profoundly affects biomedical research today.*

**Light, Jennifer S., "When Computers were Women,"**

*Technology and Culture*, July 1999, 40, 3, pp. 455-483.

Available at: <http://beforebefore.net/scima200/media/light.pdf>

Light is a Professor at MIT and head of the MIT Program in Science, Technology and Society. This is a well-done and provocative paper on the ENIAC history. Light describes how the Army, and even the media, including the NY Times, went to some efforts to showcase the men, and almost erased the women entirely from the ENIAC story.

From the Introduction: *The omission of women from the history of computer science perpetuates misconceptions of women as uninterested or incapable in the field. This article retells the history of ENIAC's "invention" with special focus on the female technicians whom existing computer histories have rendered invisible. In particular, it examines how the job of programmer, perceived in recent years as masculine work, originated as feminized clerical labor. The story presents an apparent paradox. It suggests that women were somehow hidden during this stage of computer history while the wartime popular press trumpeted just the opposite – that women were breaking into traditionally male occupations within science, technology, and engineering.*