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This Week's Citation Classic®

Hannah A. Localization and function of heterochromatin in *Drosophila melanogaster*. *Advan. Genet.* 4:87-125, 1951.
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In addition to summarizing the literature on heterochromatin, the review also pointed out the many contradictions and speculations regarding its function. [The *SCI*® indicates that this paper has been cited in over 180 publications since 1955.]

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Prior to this paper, especially in the 1940s, there was a spate of articles (including speculations) on the nature of heterochromatin. These articles were characterized not only by their lack of substantiating scientific evidence but also (and especially) by their dearth of references and citations.

I decided that some day I would survey the literature on heterochromatin in an attempt to resolve some of the discrepancies. The review was written mostly during the years I helped Curt Stern with his first edition of *Principles of Human Genetics*[1] for I had enough spare time at odd moments to do the reading and work on the manuscript.

As the basic reference for the review and as a source of data for the tables, I used C.B. Bridges and K.S. Brehme's *The Mutants of* Drosophila melanogaster.[2] The review also included a survey of the more recent literature as well as the older papers and information. I particularly wish to acknowledge the help of Richard Goldschmidt, Stern, and Leonie Piternick for their assistance in the translations and interpretations of papers in foreign languages, for their suggestions of other literature, and for their differences in interpretation of the evidence. At that time I had no thoughts of publishing the review, but at the insistence of Stern, I submitted it to E. Casperi, the editor of *Advances in Genetics*, and the rest is history.

More recently—especially in the past 10 years—many new techniques have been developed that are particularly good for helping resolve the nature of heterochromatin. Now there are many published papers, including several fine review papers by Dan Lindsley and coauthors,[3,4] that make it possible for someone to really undertake a comprehensive and extensive review of this subject. I look forward to the time when someone will once again review the subject of heterochromatin using as a basis *Genetic Variation of* Drosophila melanogaster[3] as well as the more extensive work, *The Genetics and Biology of* Drosophila, now being compiled by Lindsley and G. Zimm. (I used the Bridges-Brehme book[2] for my review.)

In the meantime, I think we should, as General MacArthur said about old soldiers, let my paper "fade away" in peace. (I am, however, very touched that it was selected as a *Citation Classic*.)

[See reference 5 for a recent work in the field.]

1. **Stern C.** *Principles of human genetics*. San Francisco: Freeman, 1949. 617 p. (Cited 605 times since 1955.)
2. **Bridges C B & Brehme K S.** *The mutants of* Drosophila melanogaster. Washington, DC: Carnegie Institution of Washington Publications, 1944. (Cited 390 times since 1955.)
3. **Lindsley D L & Grell E H.** *Genetic variation of* Drosophila melanogaster. Washington, DC: Carnegie Institution of Washington Publications, 1967. 471 p. (Cited 2,620 times.)
4. **Lindsley D L & Zimm G.** *The genome of* Drosophila melanogaster. (*Progress report*.) Lawrence, KS: Kansas University Press, 1985-1987. 3 vols.
5. **Ashburner M & Novitski E, eds.** *The genetics and biology of* Drosophila. London: Academic Press, 1976. Vols. 1a-1c.