

# Kinks In Chromatin

*The ultimate guide to understanding better how DNA behaves inside the chromatin*

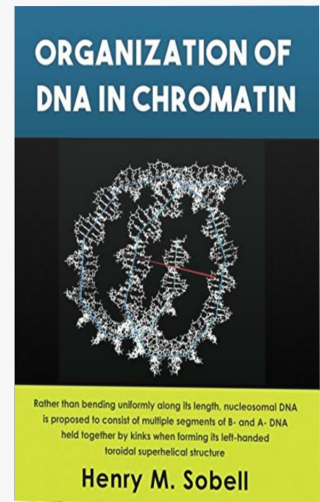
COOKSTOWN, NEW JERSEY, USA, July 13, 2021 /EINPresswire.com/ --

"[Organization of DNA in Chromatin](#)" is a biochemistry book by Dr. Henry M. Sobell. It explains conformational changes in DNA that accompany drug intercalation have led us to ask if DNA first bends or "kinks" to accept an intercalative drug or dye. Kinking is made possible by altering the normal C2' endo deoxyribose sugar ring puckering in B DNA to a mixed sugar puckering pattern of the type C3' endo (3'-5') C2' endo and partially unstacking

base-pairs. A kinking scheme such as this would require minimal stereochemical rearrangement and would also involve small energies. This has prompted us to ask more generally if a conformational change such as this could be used by proteins in their interactions with nucleic acids. In this paper, we describe an interesting superhelical DNA structure formed by kinking DNA every 10 base pairs. The structure may be used in the organization of DNA in chromatin.

Dr. Henry M. Sobell is internationally renowned for his pioneering contributions to the understanding of how the anticancer agent, actinomycin D, binds to DNA and exerts its mechanism of action. Using the technique of X-ray crystallography, he and his research colleague, Shri C. Jain, solved the structure of a crystalline complex containing actinomycin and deoxyguanosine in the early 1970s, and this information led them to propose a model that is now widely accepted to understand the general features of how actinomycin binds to DNA.

Rather than bending uniformly along its length, nucleosomal DNA is proposed to consist of multiple segments of B- and A- DNA held together by kinks when forming its left-handed toroidal superhelical structure. Learn all of this in this book and understand better the organization of DNA in chromatin.



"Organization of DNA in Chromatin" by Dr. Henry Sobell

## About Writers' Branding

Writers' Branding is a full-service self-publishing company that provides aspiring authors exclusive access to publicity and a pool of book evaluators and marketing creatives and bridges them to literary agencies and traditional publishing houses.

Please visit [www.writersbranding.com](http://www.writersbranding.com) for more information.

Writers' Branding LLC

Writers' Branding LLC

+1 800-608-6550

[email us here](#)

Visit us on social media:

[Facebook](#)

[Twitter](#)

---

This press release can be viewed online at: <https://www.einpresswire.com/article/546156492>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2021 IPD Group, Inc. All Right Reserved.