Prof. Sander Gliboff
COLL C104

Indiana University
For Thursday and Friday, 8–9 October

Assignment 9: DNA Story; Topic Statements

Readings

Required:

1. Pages 189–198 & 205–221 of "The Origin and Development of Molecular Biology" in Garland E. Allen. *Life Science in the Twentieth Century.* Cambridge: Cambridge University Press, 1978, available on Canvas, `https://iu.instructure.com/courses/1906744/files`.

2. Gary Glassman. "Secret of Photo 51." NOVA episode. Apr. 22, 2003. Produced by WGBH Boston Video. URL: `https://youtu.be/uYuo72X46pA`; transcript also available: `http://www.pbs.org/wgbh/nova/transcripts/3009_photo51.html`

Preamble

The story of the discovery of the DNA double helix has been undergoing serious revision, since it was first told by Watson himself in 1968. The Garland Allen chapter, from 1974, is still largely the old version, in which Watson and Crick's modeling efforts are the crucial contribution and the Structurists' role (epecially Rosalind Franklin's) is grossly underestimated.

The video documentary from 2003 gives the revised version, in which Franklin's old colleagues reconstruct her contributions and her shabby treatment for us.

Questions for Study and Discussion

Think about the following questions as you do the readings, and be prepared to discuss them in your Friday section.

Also write up a brief answer to the first two questions (everybody) and the one assigned to your breakout group. Upload your answers to your section Canvas page.

On Friday, after some general discussion and review, each group will meet in a Zoom breakout room to compare and discuss their individual answers and prepare a short synopsis for presentation to the rest of the class.

Everybody—Project Topics Start detailing the project description. In addition to the general topic, discuss how each of your selected sources relates to that

topic. What is the source's point of view. What can it tell us about historical events or issues?

If you need or want suggestions or additional feedback, please feel free to e-mail me or join in my Thursday office hours.

Breakout groups 1 and 2 What are the differences between the Structurist and Informationist approaches? Consider, e.g., instruments, methods, model organisms. Also their attitudes toward each other.

Breakout groups 3 and 4 Who discovered the structure of DNA? Sort out who did what, and what should count as the discovery.