

Presentation Schedule

Presentations will be made by student pairs in the last week of the semester. The presentations should be in the form of a **Powerpoint**. A written outline should accompany the presentation to facilitate study. Presentations should be **45 mins**, with **~10 mins for discussion**.

- 1) Select topics by **27 January**
- 2) Provide an **outline** at the beginning of lecture on **17 February [5%]**
- 3) Provide a **semi-final draft** at the beginning of lecture on **17 March [10%]**
- 4) **Presentations** on **28, 29 & 31 March [20%]**

Suggested Presentation topics

1. 20th century experimental evidence of **inheritance of acquired characteristics**
 - a. A Koestler (1973). *The Case of the Midwife Toad*. Random House.
 - b. AO Vargas et al. (2016). *An Epigenetic Perspective on the Midwife Toad Experiments of Paul Kammerer (1880-1926)*. [J Exp Biol Part B: Molec Dev Evol](#).
2. The Mismeasure of Man: **Reification Fallacy**
 - a. SJ Gould (1996) *The Mismeasure of Man*, rev. ed. Norton.
 - b. Phrenology & Craniometry
 - c. History of Intelligence Quotient (**IQ**) testing
3. **Eugenics**: Charles Davenport & the History of a Bad Idea
4. *“They even killed the fruit flies:”* The fate of **Genetics in the Soviet Union**
 - a. Z Medvedev (1965). *The Rise and Fall of TD Lysenko*.
 - b. NI Vavilov, SS Chetverikov, II Schmalhausen, TG Dobzhansky, etc.
5. Western **Alchemy**: Chrysopoeia, Panaceas, the Alkahest, & the Philosopher’s Stone
 - a. J Read (1995). *From Alchemy to Chemistry*. Dover.
 - b. SJ Linden (2003). *The Alchemy Reader*. Cambridge.
6. What does a **Nobel Prize** mean in Biology? Iconography & Past Controversies
 - a. Franklin, Gosling, Wilkins, Watson & Crick: DNA & the Double Helix
 - b. H Judson (1996). *The Eighth Day of Creation*, 25th anniv ed. Cold Spring Harbor.
7. **Philosophy of Biology**: Criteria of Demarcation: How does Science differ from other human activities?
 - a. TS Kuhn (1970). *Structure of Scientific Revolutions*, 2nd ed. Chicago.
 - b. Karl Popper (1963). *Conjecture & Refutation*. Cambridge
 - c. Kuhn vs Popper
8. The Role of **Technology** in Biological Progress
 - a. Development of the **Microscope**
 - b. Secrets of NIH: Marshall Nirenberg & “Cracking” of the Genetic Code as **Big Biology**
9. **Putting your tongue on a pump handle**: John Snow & Origins of Epidemiology
 - a. Great Flu Pandemic (1919) vs Covid-19 Pandemic (2020)
 - b. FM Snowden (2019). *Epidemics and Society*. Yale.
 - c. M Kinch (2018). *Between Hope and Fear*. Pegasus.