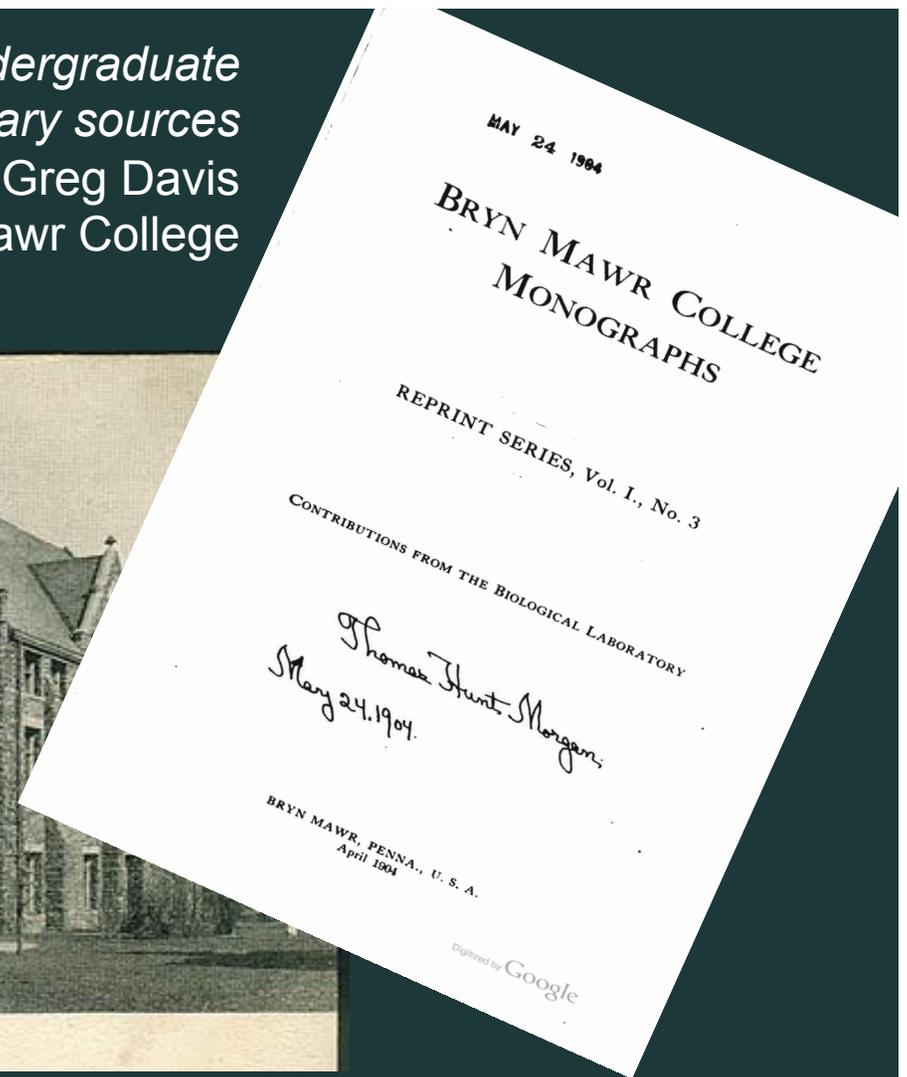


*Discovering the history of eugenics with undergraduate  
biology majors through primary sources*

Greg Davis

Bryn Mawr College

Biology 214:  
History of genetics and embryology





Nettie Stevens  
Bryn Mawr College  
1903-1912

**Stevens to Davenport - May 10<sup>th</sup>, 1910**

I have been thinking for some time of making a move before long, either to work on the cytological side in cooperation with some one who is carrying on experimental work in Genetics, provided that I remain here; or to try to secure a position as cytologist in connection with work on Genetics. We have no opportunity here to carry on experiments in heredity...

Please do not mention the fact that I have asked you this question as I do not wish it known at present that I am even considering a change.

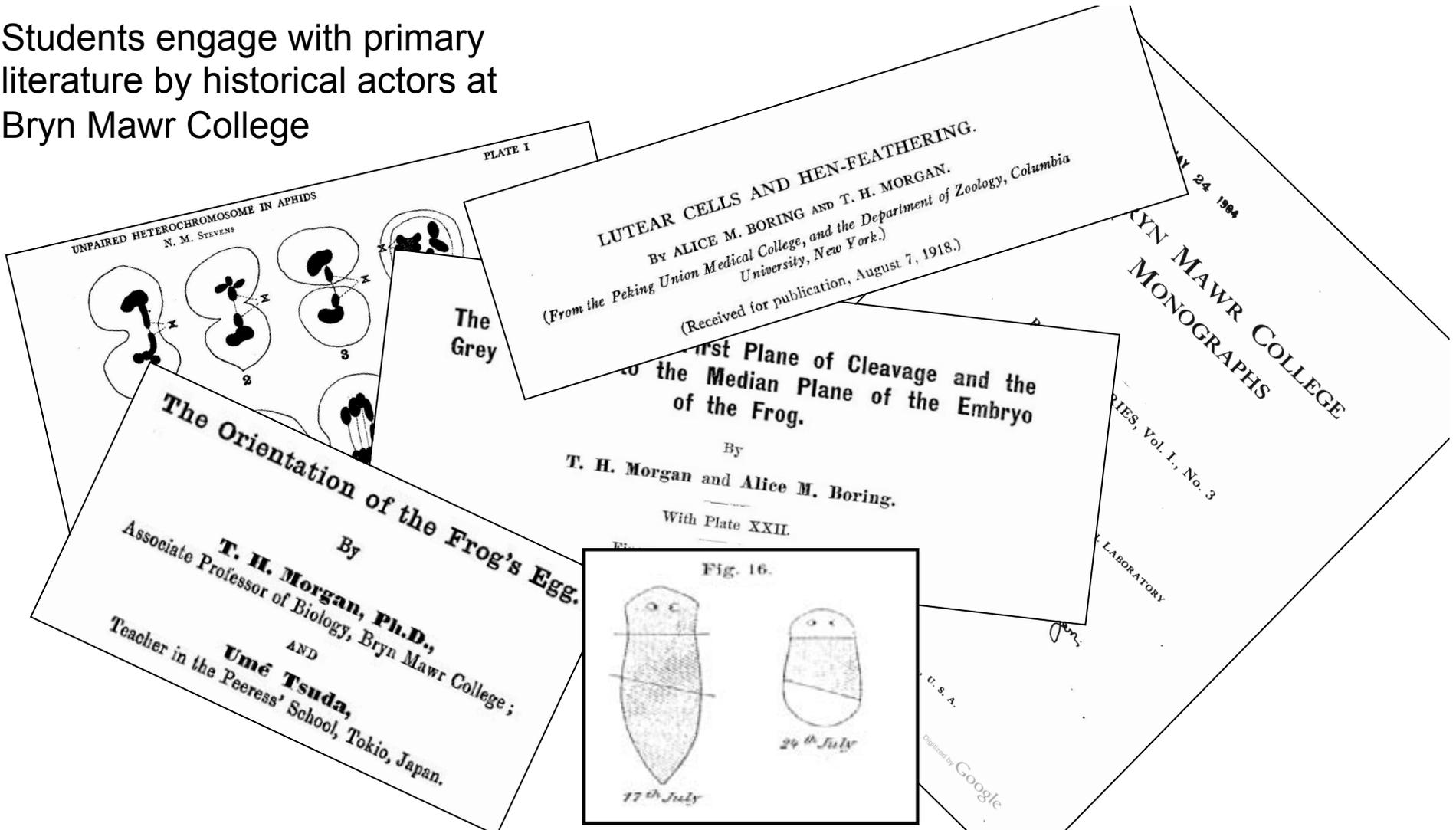
**Davenport to Stevens - March 1<sup>st</sup>, 1911**

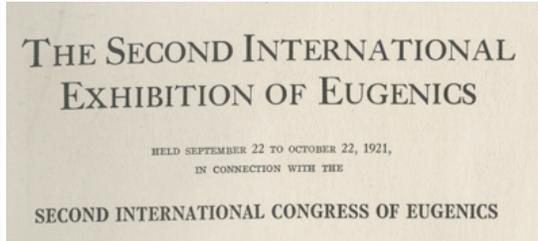
I have long wished that it might be possible for you to be more intimately associated with this Station and I should be glad to offer you the vacant position beginning the first of July or whenever it would suit your convenience.



Charles Davenport  
Director of Cold Spring Harbor Laboratory  
Founder of the Eugenics Record Office

Students engage with primary literature by historical actors at Bryn Mawr College





American  
Museum of  
Natural History  
NYC, 1921

“[G]enetics is, therefore, the very foundation on which the superstructure of eugenics is being built...”

“[T]he boundary between them [genetics and eugenics] is ill defined and movable...”

*Aims and Methods of Eugenic Societies*  
Leonard Darwin (son of Charles)

### Talks by geneticists

- *Darwinian Evolution by Mutation*
- *Inheritance in Unicellular Organisms*
- *A Simple Explanation of the Heredity Mechanism*
- *Sex Determination in Rotifers*
- *The Inheritance of Eye Defects*

### Talks by eugenicists

- *Harmonic and Disharmonic Race Crossings*
- *Some Results of Race Mixture in Hawaii*
- *Intermarriage between Jews and Christians*
- *Eugenic Problems of the Slavic Race*

## *Is Inbreeding Injurious?*

“[inbreeding] invariably brings to light the latent characteristics that were hidden by outbreeding: it cannot, from its very nature, introduce any new characters into the stock...if only the superior individuals are allowed to breed, the unwanted traits in the stock can be eliminated.”

“[if] the same congenital defect or undesirable trait does not appear in the three previous generations of two cousins...there is no more danger that the offspring of such marriages will be defective than there is danger of the appearance of defective children in any family.”

Inbreeding is ultimately *good* because it can accentuate desirable traits and reveal undesirable recessive traits that can then be selected against



*Image courtesy of Wistar Institute*

Helen Dean King  
Bryn Mawr College PhD 1899  
Wistar Institute beginning 1908

## Co-discovering/co-learning the history of eugenics with biology students using the primary literature

### *Advantages*

- Student in the role of co-discoverer rather than recipient
- Can be fun and exciting for both the instructor and student
- Discovering the unexpected can help students appreciate nuance

Not knowing exactly what you will find, however, does come with some risk of misinterpretation on the part of the student (e.g., being persuaded by rhetoric of the time period, or taking a quote out of context).

- *Works better in small groups wherein you can work closely with each student.*
- *Secondary sources are also an important support.*



### *Students whose work in Biol 214 was referenced*

- Marcia Manzone (Spring 2016)
- Stephanie Yong (Spring 2018)
- Emma Ecker (Spring 2019)

### **Primary Sources**

- Darwin, Leonard (1923) Aims and Methods of Eugenical Societies in *Eugenics, Genetics, and the Family: Scientific Papers of the Second International Congress of Eugenics*. Vol. I, Williams & Wilkins.
- King, Helen Dean (1921) Is Inbreeding Injurious? in *Eugenics, Genetics and the Family: Scientific Papers of the Second International Congress of Eugenics*, Vol. I, Williams & Wilkins.

### **Secondary Sources**

- Clause, BT(1993) The Wistar rat as a right choice: establishing mammalian standards and the ideal of a standardized mammal *J Hist Biol* 26.
- Richmond, M (2007) Opportunities for Women in Early Genetics *Nat Rev Genet* 8.
- Ogilvie, MB (2007) Inbreeding, Eugenics, and Helen Dean King *J Hist Biol* 40.