3-1-2001


John B. Jenkins
Swarthmore College, jjenkin1@swarthmore.edu

Let us know how access to these works benefits you

Follow this and additional works at: https://works.swarthmore.edu/fac-biology
Part of the Biology Commons, and the Genetics Commons

Recommended Citation

This Book Review is brought to you for free and open access by the Biology at Works. It has been accepted for inclusion in Biology Faculty Works by an authorized administrator of Works. For more information, please contact myworks@swarthmore.edu.


A beam of light, muted and subtle, captures two silhouetted figures hunched over a table, deep in conversation. One is Jun-ichi Tomizawa, the other Dale Kaiser, pioneers in early studies of DNA replication and recombination in bacterial viruses. These two giants of molecular genetics were attending the 1968 Cold Spring Harbor Symposium of Quantitative Biology that was devoted to the topic of DNA replication in microorganisms. This mesmerizing photo on the cover of this remarkable collection of 23 thoughtfully selected papers emanating from the Cold Spring Harbor Laboratory between 1903 and 1969 symbolizes the laboratory’s eminent position in the spotlight of the molecular genetics revolution.

This collection is hardly comprehensive; there is no way it could be. It does, however, represent the major genetic research themes that have dominated this world renowned laboratory, nestled at the head of Cold Spring Harbor, New York, since 1904. The 23 papers are arranged chronologically, beginning with an interesting 1903 nongenetic paper by C B Davenport on the ecology of Cold Spring Harbor. Davenport was the first director (1898) of The Brooklyn Institute’s Biological Laboratory that would eventually evolve into the Cold Spring Harbor Laboratory in 1962. The next 7 papers in this collection, published during the first two decades of this century, deal with dihybrid corn (Schull), Datura mutants (Blakeslee et al.), cancer in mice (Little, the founder of the Jackson Laboratory in Bar Harbor; Richter), unstable Drosophila genes (Demerec), and human eye color inheritance (Davenport and Davenport). The 1930s are represented by 4 papers on Addison’s disease (Rowntree et al.), PTC tasting (Blakeslee), pigeon hormones (Riddle et al.), and yeast membrane biophysics (Fricke and Curtis). The 1940s are represented by a classic study of transposable genetic elements (McClintock), and 2 papers on war-time penicillin production (Demerec). The 1950s and 1960s move into the molecular genetics era with 8 important papers: a continuation of the analysis of transposable genetic elements (McClintock), viral life cycle (Doerrman), DNA versus protein as the genetic material (Hershey and Chase), cryptopranth synthesis (Demerec and Hartman), DNA repair (Witkin), DNA length in a bacterial virus (Cairns), viral chromosomes with “sticky ends” (Hershey et al.), and DNA polymerase mutants (DeLucia and Cairns).

Witkowski has done a masterful job of selecting a range of papers highlighting Cold Spring Harbor Laboratory’s illustrious history from the earliest beginnings of Mendelism to the beginning of the molecular genetics era. Each paper is preceded by an insightful introduction and a short biography. The laboratory’s central role in the misguided and sordid eugenics movement is mentioned, although downplayed. Davenport was a leader of the eugenics movement, and a more critical analysis of his and the laboratory’s involvement would have been appropriate. That issue aside, this is a valuable book that belongs on the shelf of every geneticist and college library.

JOHN B JENKINS, Biology, Swarthmore College, Swarthmore, Pennsylvania

BRIGHT PARADISE: VICTORIAN SCIENTIFIC TRAVELERS.


Few biologists will have considered the influence of naturalists such as Alfred Russel Wallace on novelists like Joseph Conrad or Robert Louis Stevenson. Bright Paradise explores this scientific-cultural connection while profiling the expeditions and subsequent social impact of more than a dozen British naturalist-explorers of the Victorian period. Although disparate in character and class, all of the scientific travelers penetrate the wilderness to collect and catalog specimens and record observations unique to regions beyond their civilized Eurocentric world. By so doing, according to Raby’s central theme, the naturalists and their collecting enterprise become tacit (if unwitting) agents of British imperialism by preparing the way for domination and exploitation of new territories for commerce.

Raby’s selection of naturalists extends beyond the obvious choices. He allows limited space to celebrated naturalists such as Charles Darwin on board HMS Beagle, Joseph Hooker botanizing in the Himalayas, Thomas Henry Huxley touring the coasts of New Guinea and Australia on HMS Rattlesnake, and Henry Walter Bates in the Amazon. More detailed, however, is Raby’s welcome description of the forays of little-known figures such as Mungo Park, Richard Lander, Richard Spruce, Mary Kingsley, and botanical artist, Marianne North. Alfred Russel Wallace emerges as a central character, as Raby depicts the persistent naturalist’s zoological and anthropological observations in South America, and describes his pursuit of the orangutan in Borneo and the bird of paradise in the Aru Islands, off New Guinea.

Particularly unique for a work in the history of science is Raby’s background in literature. More typical of his resume are books that include Oscar Wilde (1988). Cambridge (UK): Cambridge Univer-