

Other Books of Interest

Bhatnagar Laureates (1958–91). Compiled by SUSHIL KUMAR and eight others. Human Resource and Development Group, Council of Scientific and Industrial Research, New Delhi, India, 1992. xxiv, 492 pp., illus.

To honor outstanding Indian scientists under the age of 45 the Shanti Swarup Bhatnagar Prize for Science and Technology, named after the founding director of India's Council of Scientific and Industrial Research, was instituted in 1957. As of 1991 the prize had been awarded to 259 scientists and engineers, and now CSIR has brought together this biographical account of this group who "exemplify the best talents in Indian Science." The volume opens with indexes of winners by name, by specialization, and by year of award. With respect to specialization, the basic fields of physical, biological, and chemical sciences lead the list with 50, 46, and 43 winners respectively, and engineering, mathematical, medical, and earth sciences follow with 37, 32, 28, and 23. The main body of the work consists of one- to two-page accounts for each winner, summarizing his or her (seven are women) education, professional affilia-

tions, awards, general contributions, and major publications. In his introduction to the work S. K. Joshi, current director general of CSIR, observes that "a great deal can be learned about the profile of Indian science" from these accounts. A diligent reader could, for instance, make a preliminary assessment of the extent of overseas training Indian scientists have been receiving or of which institutions in India the most successful researchers tend to cluster in, while also gleaning considerable information about the concerns of recent science more generally. And for those who might be interested in establishing more direct contact with any of the winners current addresses (as well as photographs) are also provided.

—Katherine Livingston

The Retroviridae. Vol. 1. JAY A. LEVY, Ed. Plenum, New York, 1992. xiv, 489 pp., illus. The Viruses.

The series The Viruses, under the editorship of Heinz Fraenkel-Conrat and Robert R. Wagner, now comprises over 20 volumes, the topical arrangement being according to family or group—the adenoviruses, the bacteriophages, the herpesviruses, and so on. The present volume inaugurates the treat-

ment of the retroviruses. Jay Levy notes in his preface to the volume that these viruses, which were among the first to be identified and were known as RNA tumor viruses prior to the discovery of reverse transcriptase, not only are of importance with respect to human health but, as they affect domestic animals, have "both commercial and emotional ramifications." The volume opens with an overview of the group by Howard M. Temin and an account of retrovirus structure and classification by John M. Coffin. These are followed by discussions of the evolutionary potential of complex retroviruses by Gerald Myers and George N. Pavlakis and of retroelements in microorganisms by David J. Garfinckel. In the longest chapter in the volume (140 pages, including 34 of references) Paul A. Luciw and Nancy J. Leung deal with mechanisms of replication. The volume concludes with accounts of retroviruses in birds (Lawrence N. Payne) and in rodents (Christine A. Kozak and Sandra Ruscetti) and a subject index. The second volume on the retroviruses, scheduled for publication in 1993, is to include discussion of retrovirus entry into cells, oncogenic feline viruses, lentiviruses in several other mammals, equine retroviruses, spumaviruses, and human oncogenic retroviruses. A projected third volume will include consideration of virus-host interaction.

—Katherine Livingston

Minorities in Science: Bibliographic Highlights

In its "Women in Science" issue of 13 March 1992 *Science* was able to name (p. 1449) some 40 books on that theme that had been reviewed in recent years. The book literature on minorities in science is much less extensive, but there are some notable works that also have received coverage in *Science*.

The results of a survey comparing the careers of 600 black doctorate recipients in the sciences with those of white counterparts were presented in Willie Pearson, Jr.'s 1985 book *Black Scientists, White Society, and Colorless Science: A Study of Universalism in American Science* (Associated Faculty Press), reviewed in *Science* 231, 505 (1986). Pearson has also edited, with Kenneth Bechtel, a collection of essays entitled *Blacks, Science, and American Education* (Rutgers University Press, 1989), reviewed 247, 349 (1990), which contains some historical and sociological analysis of relevant issues and discusses results of surveys of educational attainment and progress. Of at least historical interest might be a 1955 collection of reprinted scientific papers by black scientists edited by Julius H. Taylor and published under the title *The Negro in Science* (Morgan State College Press), reviewed 122, 1237 (1955).

Several of the books that were included in *Science*'s listing of books on women in science also give some consideration to minority members. Most notably, the fortunes of black women in science were the subject of a special issue (vol. 6, no. 2) of the journal *Sage*, reviewed 253, 349 (1991), and black women college students were the focus of part of the research reported on in

Dorothy C. Holland and Margaret A. Eisenhart's *Educated in Romance*, a study of the effects of college experiences on women's career aspirations, reviewed 252, 989 (1991).

As with the case of women, a considerable proportion of the works on blacks in science take the form of biography. Two black scientists much written about are Benjamin Banneker (1731–1806) and Charles Richard Drew (1904–1950). Books on their lives and careers that have been reviewed in *Science* are Silvio A. Bedini's *The Life of Benjamin Banneker* (Scribner, 1972), reviewed 178, 151 (1972), and Charles E. Wynes's *Charles Richard Drew: The Man and the Myth* (University of Illinois Press, 1988), reviewed 242, 1315 (1988). Kenneth R. Manning's highly acclaimed *Black Apollo of Science* (Oxford University Press, 1983), reviewed 222, 1006 (1983), recounts the accomplishments and hardships of a perhaps less generally well known figure, the experimental embryologist Ernest Everett Just (1883–1941).

Books about non-black minority members in science are especially scarce, but anyone attempting to compile a bibliography on that theme might want to include accounts of the careers of two non-native-born scientists of color who faced difficulties in pursuing careers in the United States: Isabel R. Plesset's *Noguchi and His Patrons* (Fairleigh Dickinson University Press, 1980), a biography of the Rockefeller University microbiologist Hideyo Noguchi, reviewed 212, 434 (1981), and S. K. Gupta's *In Quest of Panacea* (Evelyn, 1987), a life of the Indian biochemist Yellapragada SubbaRow (1895–1948), reviewed 240, 1066 (1988).