

Book reviews

Battle of the Genomes: The Struggle for Survival in a Microbial World. By H. M. Lachman. Pp 340. (Science Publishers, Enfield, NH, USA, 2006.) US\$29.95, ISBN 1-57808-432-6, paperback. doi: 10.1017/S0021932007002337

Battle of the Genomes chronicles aspects of microevolution revolving around our encounters with catastrophic infectious diseases, the genetic changes that have resulted in the creation of deadly microbes, and our genome's response to them. The book is a fantastic crossfire of facts, stories and personal views that is well written, and often resembles a front-line report. Even complex biological phenomena appear to be easily comprehensible. But, the author tends to generalize, citations are missing, and simplifications such as 'simple oral hydration can reduce the cholera death rate from 50 percent to less than 0.5 percent, a hundred-fold reduction (p. 125)', lack scientific accuracy, and rather sound like statements obtained from the local TV.

The first chapter introduces the Microbial World, telling about its diversity, about bacterial species cultured from an isolated pool of salt water under an Antarctic ice ridge at temperatures of -10 degrees Celsius – the interested reader would like to find a citation – followed by a short introduction into polymerase chain reaction, and mentioning Anton van Leeuwenhoek as the Dutch inventor of the microscope. The reader is supposed to learn that the combined weight of all the bacteria in any person's gastrointestinal system alone is about two pounds; the variety of commensal microbes are introduced. It is mentioned that contaminated water is responsible for about three million deaths every year from infectious diarrhoea, but proper statistics are missing. The chapter shortly runs through the basics of DNA replication, transcription, exons and introns, and RNA splicing, mentions HIV replication, AZT medication, the Spanish Flu which killed tens of millions people around the world – but neither statistics nor citations are given – mentions the recent bird flu epidemics, and finally cites a source telling that nearly one-hundred Bengal tigers at the Sriracha Tiger Zoo in Thailand perished after eating raw chickens contaminated with influenza virus. The chapter ends with plasmids and bacteriophages, mentions enterohemorrhagic *E. coli*, and shortly comments on the Black Death.

The second chapter, Magic Bullets, introduces defence strategies, and summarizes numerous stories about various Nobel Laureates who worked in the field of immunology. The crossfire continues presenting some biochemical details on antibody production, and again a number of stories about ancient and medieval beliefs that disease was caused by imbalances of Yin and Yang, the four humours, by sinful behaviour, by poisoning of wells by Jews, etc.

Some more details are presented in Chapter 3 – The Mosquito Plague. But the fireworks continue with general statements such as: 'malaria has been endemic in human and monkey populations for eons', to first reports in early Sumerian writings, Chinese texts, and the region of marshes south of Rome, an area that was uninhabitable until the 1930, when Benito Mussolini, Italy's fascist dictator, had them

drained. We then learn about Laveran, Carl Zeiss – the inventor of oil immersion microscopy – and the text quickly switches to elephantiasis, and the work of Manson, Grassi, Robert Koch and stories about the English Civil War, Cromwell and Charles II.

Chapter 4 refers to beans and glucose 6-phosphate dehydrogenase (G6PD), and provides a spectrum of stories related to G6PD deficiency and malaria. Chapter 5 presents blood typing and disease; we learn that DNA isolated from the remnants of a strain of *Helicobacter pylori* in ancient Chilean mummies differs from the European type that infects modern-day Central and South America. And the hurricane anecdotes even touches unscrupulous blood traffickers that have spread HIV through unsafe collection practices and by not testing for the virus to save on cost. Chapter 7 deals with tainted water, cholera is focused upon in Chapter 8, burning fever in Chapter 9, and cystic fibrosis in Chapter 10. Again, I must confess that part of this reading is very diverting, and certainly touches extremely interesting topics, but when citing ‘woe to the child when kissed on the forehead tastes salty. He is bewitched and soon must die’, the reader would like to know who said this, and where can we find the source. The following chapter refers to the plague, smallpox and other epidemic diseases.

Lachman finishes his book with remarks on the Human Genome Project. But when characterizing this project as the ‘multibillion-dollar, decade-long effort . . . biology’s big-budget equivalent to the lunar-landing program during the 1960s’, the author should cite statistics about the real costs rather than stories about Mr Watson and ‘that woman’.

Battle of the Genomes certainly contains numerous interesting and informative details; it is nicely written and it reflects broad knowledge and the vivid associative thoughts of Dr Lachman – I am surprised that James Joyce was never mentioned, but it is a pity that there are no tables, no figures and that it lacks scientific accuracy.

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Breast Feeding and Sexuality: Behaviour, Beliefs and Taboos among the Gogo Mothers in Tanzania. By Mara Mabilia. Pp. 140. (Berghahn Books, New York, Oxford, 2005.) £36.50, ISBN 1-157181-677-1, hardback. doi: 10.1017/S0021932007002362

This volume is exemplary in the field of anthropological research. The Cigongwe village in the Dodoma region of Tanzania is the setting for this five-chapter discussion about women’s relationships, desires and obligations in relation to ‘good’ mothering.

The writing style is clear and reflective – the project rationale, interview practicalities and Mabilia’s emotional experiences throughout each stage of the research are articulated in a concise and interesting manner. The first chapter details seminal works in the literature review and references are appropriately analysed in relation to her findings throughout the text. The reader discovers how comprehensive background reading and mastery of language skills conducted in advance were