BOOK REVIEW

Zika Virus Surveillance, Vaccinology, and Anti-Zika Drug Discovery: Computer-Assisted Strategies to Combat the Menace

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The book entitled “Zika Virus, Surveillance, Vaccinology and Anti-Zika Drug Discovery” edited by S. C. Basak, A.K. Bhattacharjee and A. Nandy is an excellent and comprehensive book on Zika virus. The book is well written and well-organized and gives the most up-to-date and very interesting information related to the Zika virus. As such, it describes a holistic approach to the Zika virus problem.

Zika virus has spread into large parts of the globe from its first reservoir in the Zika forest of Uganda. Zika virus caused an outbreak in Brazil and other Latin American countries. A sudden rise of Zika virus infections has posed several challenges in the domain of public health. Since neither any vaccine nor any drug currently available to treat the Zika virus’ infection, the authors included a comprehensive part for the identification of new compounds as potential therapeutics against Zika virus by employing in silico molecular modelling studies, which is the beauty of this book. Regarding that, the discovery of a new drug takes about 10 to 15 years and costs over two billion US dollars, any technology that can improve the efficiency of the process is highly valuable and computer-aided drug-discovery, thus, plays a pivotal role in this endeavour. The authors’ extensive professional experiences are clearly seen in this part. The authors presented their own research as well as a comprehensive literature search.

Besides, the book has highlighted the efforts and progress being made to develop suitable vaccines against the Zika virus, and in some detail, the latest results in the promising new approach of peptide vaccinology. In this book, authors also discussed the utility of quantitative nucleic acid sequence comparison methods in the characterization and surveillance of emerging viral pathogens, particularly, flavivirus strains including the Zika virus.

The book is a comprehensive and accessible guide to scientists and as well as people in related disciplines interested in learning more about this topic. The authors have maintained the simplicity of writing, which has added to the splendour of this book. To the best of my knowledge, there is no other book that includes such a holistic approach for prevention, mitigation, and treatment of Zika virus infection and underlines the importance of the interdisciplinary approach to effectively formulate strategies for preventing a future outbreak. I would recommend this book to the researchers since it provides a valuable window into a Zika virus problem and it is a necessary and welcome contribution to the field.

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