

# Veterinary Vaccines

## Current Innovations and Future Trends

**VETERINARY  
VACCINES**Current Innovations  
and Future TrendsEdited by  
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Caister Academic Press

**Edited by: Laurel J. Gershwin and Amelia R. Woolums**

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The global demand for more, affordable, safe, and exotic foods in recent years has led to the increased use of intensive farming: this is closely associated with increased outbreaks of a variety of animal and zoonotic diseases. In addition to infectious diseases, cancer in animals is of key importance and research in this area has applications in humans that can be more relevant than studies from murine models. The urgent need for the development of new efficacious vaccines to control animal diseases has never been clearer.

This concise book captures the essence of current and future shifts in vaccine development research that will likely transform our understanding of methods to stimulate specific and protective immune responses to infectious diseases, and to offer improved therapeutic applications for oncology patients. The book opens with a chapter on reverse vaccinology and systems vaccinology approaches that should lead to more effective vaccines with fewer side effects. This is followed by a chapter describing recent developments in cancer immunotherapy and vaccination. Additional chapters provide updates on mucosal vaccines in the bovine context, adjuvants, transboundary diseases of livestock, and maternal and neonatal immunization. The book closes with a timely discussion of the newest vaccine modality currently being evaluated to control the human COVID19 pandemic, mRNA vaccines.

This book is essential reading for everyone working with vaccine development, from the PhD student to the experienced scientist, in academia, the pharmaceutical or biotechnology industries, and in clinical environments.

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