

FOREWORD

LUIS ENJUANES

National Centre for Biotechnology, CSIC

The Balmis Expedition or Royal Philanthropic Vaccine Expedition was the first global vaccination campaign. Indeed, it was a global health campaign aimed at propagating and perpetuating the vaccine throughout the Spanish overseas territories which, at the beginning of the nineteenth century, were worldwide in their extension. Although it was an English doctor (Edward Jenner) who discovered the smallpox vaccine, it was a Spanish doctor (Francisco Xavier Balmis y Berenguer) who assumed responsibility for its propagation throughout the world by leading this expedition. Vaccines have since become the backbone of public health in the world and the expedition led by Balmis is the primary model in this respect.

The global vaccination campaign that was carried out at the beginning of the nineteenth century has been termed both a health and medical achievement and a titanic expedition. At that time, medicine had advanced thanks to the scientific and cultural context of the Enlightenment. The Enlightenment expeditions to the Americas that took place during the reigns of Charles III and Charles IV tested and accepted the model of the royal expedition that would later be developed in the Royal Philanthropic Vaccine Expedition. Smallpox epidemics periodically ravaged all overseas territories. They affected both servant and lord alike, and the disease even influenced the succession of the Spanish royal dynasty, causing the death of King Louis I on August 31, 1724.

From a health perspective, the discovery of America increased transoceanic mobility, and what was once a local event now became one with a global impact. This was the certainly the case with diseases and epidemics, as well as responses to them, which went from being local and improvised to articulated and foreseen. This was the first step in disease control. Throughout history and among different peoples, attempts had been made to control smallpox, from the expansion of the Chinese Empire to the strict enclosures imposed on Muslim harems.

The first and earliest measure to be implemented was isolation and quarantine. This involved significant economic and political risks, while the healthy population did its best to circumvent such confinements. The second measure, copied from the East, was brought to Europe by Lady Mary Montagu, who had lived in the Ottoman Empire accompanying her husband who was ambassador to that territory. Once the technique of voluntary contagion became known, it was put into practice in Great Britain and from there it spread throughout Europe. This practice was risky: self-inflicted contagions could become generalized and trigger uncontrolled epidemics. The third measure arrived with the vaccine discovered by Edward Jenner in 1796, after he practiced vaccination among the inhabitants of the county of Gloucestershire. Two years later, in 1798, the results of his observations were published in a book entitled *An Inquiry Into the Causes and Effects of the Variolae Vaccinae*. Reports of the vaccine reached the Spanish Crown in 1800 and was published in the *Seminario de agricultura y artes dirigido a los párrocos* addressed to

parish priests, which was distributed throughout the Spanish territories at the initiative of Manuel Godoy, who saw the pulpit as a channel for the education of the population. The three methods coexisted in space and time, but the benefits of vaccination quickly prevailed over the other two.

The Royal Vaccine Expedition not only disseminated the vaccine throughout the Spanish overseas territories, but also perpetuated it in those lands thanks to the establishment of the Vaccine Boards. These institutions oversaw the immunization of the population and were consolidated as health organizations until after the independence of the territories, maintaining their public, hierarchical and central character. A novelty in this health initiative was its philanthropic nature. The spread of the smallpox vaccine transcended the utilitarian spirit of the Enlightenment.

The success of the Royal Expedition was recognized by the population and political and health authorities. Its legacy has been passed down among medical historians. In 2020, the model, good work and spirit of the Royal Philanthropic Vaccine Expedition inspired Spain to name the military operation against the COVID-19 pandemic Operation Balmis in honor, memory and tribute to this health endeavor. The operation deployed a total of 187,000 military personnel and took place between March 14 and June 20, 2020. Once completed, it was followed by Operation Baluarte, which was the second line of military defense to stop the pandemic with the employment of 5,000 troops who carried out tracing functions.

Operation Balmis in the twenty-first century and the Royal Philanthropic Vaccine Expedition in the nineteenth century have provided answers to two grief-stricken societies overwhelmed by events and anguished by uncertainty. In both cases, a tiny virus shook the pillars of their modernity.

At a time when human beings believe they control everything, they have been forced to return to the “cave” so as not to perish. The fear of indiscriminate death has changed our habits and we will never go back to what we were. We have lost attitudes, customs and norms and, supposedly, we have acquired other habits, behaviors and rules that allow us to coexist with the virus. Now that it is here, we have to tame it. To achieve this, the first thing we did was to name it: coronavirus, SARS-CoV-2, and the disease it produces, COVID-19. And the second thing, as Alexander von Humboldt would say, will be to obey it in order to tame it.

The values of human, scientific and political generosity are more alive and more necessary than ever. The precedent set by the Royal Philanthropic Vaccine Expedition more than two hundred years ago still stands. The numbers in the statistics and the news on television put the focus on public health as opposed to the health of the individual. What matters is to care for the group. The same disease affects everyone everywhere in the world. To curb this twenty-first century pandemic, historical models have been sought and the figure of the director of the Royal Philanthropic Vaccine Expedition has been rescued.

This book is structured in three main blocks of content, in addition to the diachronic development of the Royal Philanthropic Vaccine Expedition. The first part, entitled *Relations and Contexts: from the Eighteenth to the Nineteenth Century*, situates the expedition in the health, political and welfare context. The second part is entitled *Profiles and Perspectives of Francisco Xavier Balmis y Berenguer*. It analyzes the figure of the director from different perspectives. Finally, the third section, entitled *Frames and Perspectives of the Royal Vaccine Expedition*, delves into the dimensions of the vaccination expedition within the framework of Enlightenment expeditions.

This book is an effort by the CSIC to highlight the figure of Francisco Xavier Balmis, the members of the expedition and the vaccinated children, transporters of the *seed* of the vaccine, in the context of the social and political uncertainty caused by the revolutions in America and Europe.