

## Follow-up report

Friends of Gutenberg – Jour Fixe on 28 April 2022 at 6 pm in the Kulturei Mainz

**Topic:** Jesuits versus Galenists – bitter book dispute about the usefulness of fever bark against malaria in the 17th century

**Speaker:** Dr. Michael Schulte

On 28 April at 6 p.m. the Jour Fixe of the International Gutenberg Society and the Gutenberg Foundation took place under the motto "Wine and Knowledge" with a lecture by Dr. Michael Schulte on the topic "Jesuits versus Galenists – bitter book dispute about the usefulness of fever bark against malaria in the 17th century" in the Kulturei Mainz.

Dr. Michael Schulte has been working in research in the field of chemical pharmacy at Merck in Darmstadt since 1995. At the beginning of his lecture, he introduced the historical circumstances and the disease malaria, which was rampant throughout Europe in the 16th and 17th centuries. At that time, only speculations could be made about the disease as well as transmission and infection routes.

Schulte then provided an overview of the current state of research. A newly developed vaccination against malaria, for example, currently only promises 30 per cent protection, so that only the symptoms and not the disease itself can be combated. Hope for this lies with the Mainz-based BionTech company, which currently wants to develop a vaccine against malaria with the help of their research on the new mRNA vaccines.

In his further remarks on the historical development of an effective remedy against malaria, Schulte reported, among other things, on the chronic malaria illness of the famous poet Friedrich Schiller. To alleviate his suffering, he regularly took high doses of the so-called cinchona bark, which the Jesuit Agostino Salumbrino discovered among South American natives. At that time, the Jesuits were exploring the regions of South America and were interested in the remedies and medicines of the local inhabitants. The active ingredient quinine, which was effective if taken at the right time, was able to successfully combat the severe fever attacks triggered by malaria.

Malaria was a very deadly disease, especially for children, but numerous kings, emperors and popes also fell ill and died from it. The traditional coronation journeys to Italy were even called "death journeys" for this reason, because many newly appointed kings, emperors or popes did not survive them due to malaria. Scholars argued bitterly for years about the right method of treatment, which they wrote about in their writings. But the treatment with cinchona bark finally won out over the 4-juices theory and the use of mercury, which was associated with strong side effects and symptoms of poisoning.

In the 19th century, fever bark was often taken as a prophylactic against malaria and ever larger quantities were needed. However, cinchona bark could only be extracted by hand through the laborious scraping of the bark from the tree. In addition, the ruling colonial powers had only moderate success in their attempts to establish plantations with the valuable cinchona trees in more places.

In the last part, Schulte already led over to the subsequent wine tasting, which was taken over by the Bürgermeister Carl Koch winery. The winery was closely connected to the lecture. Its founder, the pharmacist Friedrich Koch, initially ran a large quinine production in Oppenheim in the mid-19th century and supplied Emanuel Merck, the founder of the Merck company, among others. Koch was the market leader in Germany with his production and in his heyday alone covered 60% of the world's demand.

Today, Friedrich Koch's heirs run a winery in the courtyard of the former Chinin factory, and cellar master and plant manager Augustin G. Novoa presented three of their excellent wines after the lecture. Thus, the evening came to a successful conclusion in good weather and with relaxed conversations among the numerous guests.