



## *Helicobacter pylori* vaccine platform

---

*Helicobacter pylori* and *Campylobacter spp.* are leading causes of gastrointestinal illness worldwide. Existing solutions are limited, and there's a need for broad-spectrum protection. acib offers a dual-protection vaccine platform using *H. pylori* to deliver *Campylobacter* antigens, potentially reducing development time and costs for future multi-pathogen vaccines.

---

### BACKGROUND

A Nobel prize was awarded in 2005 for work on *Helicobacter pylori* and its role in causing ulcers. *H. pylori* is a gram-negative bacterium able to move using its flagella. It's not only able to survive, but also to thrive in the acidic environment of our stomach, creating a protective niche for itself. *H. pylori* is not only a causative agent for peptic ulcers, but long-term exposure is also a risk for stomach cancer. *Campylobacter spp.* is one of the main causes of foodborne disease in developed countries and the number one cause of bacterial gastroenteritis in Europe with approximately a quarter million cases each year and a leading cause of bacterial diarrhoeal illness worldwide. As of recently, both have extensively studied and also genetic tools for manipulation have been developed.

### TECHNOLOGY

Imagine you could be simultaneously be protected from *H. pylori* and *Campylobacter spp.* Sabine Kienesberger has worked for years both on *H. pylori* and *Campylobacter spp.*, developing a unique understanding of their physiology and pathogenicity. She is now focusing on a project expressing universal *Campylobacter* antigens on the surface of *H. pylori* to be presented alongside their own antigens. Upon oral ingestion this vaccine hits two birds with one stone, contributing to a more comprehensive gastrointestinal health in humans.

### OFFER

We are looking for partners in developing this next-generation vaccination strategy, which can later be extended to other gastrointestinal pathogens e.g. Shigella, but also viral agents such as Norovirus, where surface antigens of several strains could be presented in parallel to yield a single, universal vaccine. acib would exclusively and fully transfer all intellectual property developed in this project to you as our company partner/investor.

Contact us to find out about the future of gastrointestinal health solutions!

### acib-EXPERTS:

Dr. Sabine Kienesberger-Feist

### DEVELOPMENT STATUS:

Technology Readiness Level 2  
(Technology concept formulated)

### IP(s):

To be generated for project partner

### KEYWORDS:

Vaccine Platform  
Gastrointestinal Health  
Peptic Ulcers  
Stomach Cancers  
Gastroenteritis  
Oral Vaccination  
Dual Protection  
Unmet medical needs

### CONTACT:

Dr. Martin Trinker  
Director Business Development  
tel: +43 316 873 9316  
e-mail: [martin.trinker@acib.at](mailto:martin.trinker@acib.at)

Austrian Centre of Industrial  
Biotechnology (acib)  
Krenngasse 37  
8010 Graz  
<https://acib.at>