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Pathogenesis of Helicobacter pylori

Helicobacter pylori is a bacterium that was discovered in 1981 by Barry Marshall and Robin Warren, who in 2005 were awarded the Nobel Prize in Physiology or Medicine for their discovery. H. pylori infects the stomach of approximately half the world’s population. In about 10% of those infected, H. pylori will cause either peptic ulcer or gastric cancer, which is the third most common cause of cancer death in the world.

The overall goal of the Solnick laboratory is to understand the pathogenic mechanisms by which H. pylori causes gastroduodenal diseases.

Biomarkers of Helicobacter pylori-associated gastric cancer
Cooke CL, Torres J, Solnick JV

Inflammation, immunity, and vaccine development for Helicobacter pylori
Müller A, Solnick JV
Helicobacter. 2011 Sep;16 Suppl 1:26-32

Understanding how and in whom H. pylori infection causes gastroduodenal disease, and perhaps developing vaccines to prevent it, would have major implications for public health worldwide.

The mission of the CNPRC is to improve human health and quality of life through support of exceptional nonhuman primate research programs.