Bacterial lipids promote deleterious inflammation through C-type lectin receptors

Innate immune receptors on host cells recognize a range of pathogens to confer protective immunity against infection. However, successful pathogens often utilize host immune responses to trigger deleterious inflammation that leads to tissue injury. One of the most common bacterial pathogen worldwide, *Helicobacter pylori* (*H. pylori*), has been causally implicated in chronic gastritis leading to gastric metaplasia/dysplasia. We found that *H. pylori* acquires lipids from host cells to generate modified lipids that induce potent inflammatory responses. These lipids were directly recognized by C-type lectin receptors (CLRs). Gastritis induced upon *H. pylori* infection was ameliorated in mice lacking these receptors, whereas bacterial load was unaffected. These results suggest that CLRs induce ineffective or even detrimental immune responses through the recognition of unique lipids during *H. pylori* infection.