Outline for student project at Dept Clinical Microbiology, Uppsala University Hospital, 2026/2027

Background

Our laboratory provides service in clinical microbiology, mainly for the health care in Region Uppsala but also some national reference tasks. One of our national reference tasks is diagnostics of Chlamydia psittaci, a species that may cause zoonotic infections in humans, even with severe outcome.

At present >12 different Chlamydia species are defined of which some are zoonotic and cause human infections. The most prevalent species is C. psittaci having birds as natural host. Other species occasionally causing human infections are C. caviae, C. abortus and C. felis. We wish to improve our diagnostics and also genotype detected C. psittaci cases. The aim is to study the transmission from birds to humans and identify C. psittaci genotypes and their linkage to different kind of birds. This will improve the epidemiological understanding of the zoonosis psittacosis.
The study has focus on Swedish psittacosis cases but it is also linked to an international multicenter study in Europe.

We will use HRM-PCR, a special kind of PCR based on melt curve analysis, and also gene sequencing.

The project can preferably start in 2026 or at least in early 2027.

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