P20: IMMUNE AND PATHO-PHYSIOLOGICAL RESPONSES TO STRAINS OF *GIARDIA DUODENALIS* DIFFERING IN VIRULENCE AND PATHOGENICITY IN NEONATAL OUTBRED QUACKENBUSH SWISS MICE

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Marked differences were found in the infection dynamics, histopathological responses and serum antibody responses of neonatal mice infected with either of two *Giardia* strains, BRIS/83/HEPU/106 (isolated from a human) and BRIS/95/HEPU/2041 (isolated from a bird). Neonatal mice infected with the bird strain carried high parasite burdens (6.7 times greater than in mice infected with the human strain at peak of infection) and were chronically infected. Mice infected with the human strain cleared infection by 15 days pi, while those infected with the bird strain still had parasites present at 26 days pi. Infection with the bird strain of *Giardia* (compared to the human strain) also resulted in greater patho-physiological alteration to the gut mucosa, including greater villous atrophy and hyperplasia of goblet cells and vacuolated epithelial cells. Neonatal mice infected with the bird strain also produced less serum anti-*Giardia* IgA and IgM than mice infected with the human strain. In contrast, more total (non-specific) serum IgA was detected in mice infected with the bird strain compared to those infected with the human strain of *Giardia*.