Progress Report STP 2013-018 (FY 2014-2015)

Genetic diversity of *Blastocystis isolates* found in West Australian native fauna

Animal Science

Project Core Team

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Genetic diversity of *Blastocystis isolates* found in West Australian native fauna

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Progress Report

Prior to this study, limited data was available regarding the prevalence of *Blastocystis* in Australian native fauna. This study determined the prevalence and the genetic diversity of *Blastocystis* in wild native fauna in the south-west region of Western Australia. As part of this study, four species were examined for *Blastocystis* and four different genetic groups (subtypes) were found within these populations. Furthermore, a molecular tool was developed to screen samples for *Blastocystis*, *Giardia duodenalis* and *Cryptosporidium sp.* simultaneously. This multiplex PCR was tested against singleplex PCRs and microscopy. We have found this test to be equally sensitive or to have greater sensitivity than the singleplex PCR, and it has greater sensitivity and specificity than microscopy. Data collation and two publications are currently in preparation.