

Brown Jelly Syndrome in Captive Coral (*Euphyllia* spp.)

Tara Androschuk (MacEwan University) & Dr. Ross Shaw*

MacEwan University

POSTER

ORAL Discovery

Brown Jelly Syndrome (BJS) is reported to be one of the most commonly occurring coral diseases in aquaria. It is characterized by a distinct brown jelly mass floating around infected coral and rapid tissue loss. A closer look at the brown jelly mass reveals that it is composed of coral tissue, zooxanthellae, ciliates, bacteria, and viruses. Here we investigate three potential causal agents of BJS: ciliates, bacteria, and viruses. Healthy *Euphyllia* spp. coral were inoculated with suspected causal agents and coral health was measured using fluorescence analysis. No change in fluorescence was observed when healthy coral fragments inoculated with ciliates suggesting the ciliates are opportunistic invaders. No change in fluorescence was observed for *Pseudomonas* spp. inoculations. The results suggest that *Pseudomonas* spp. and ciliates are not the causal agents of BJS. Current research is focused on viruses as the potential causal agent of BJS.