

## **Progress Report**

**Award Title:** Undergraduate Scholar in Regenerative Medicine

**Education Grant Recipient:** Anja Cucak

**Faculty Sponsor:** Dr. Michael Kyba, PhD

**Grant Period:** 2015-2016

**Site:** University of Minnesota

My project has been toward developing an improved mouse model for the disease facioscapulohumeral muscular dystrophy (FSHD), a condition that involves the progressive deterioration of skeletal muscle of the face and upper limbs. It is thought that in this disease, regeneration is impaired and the skeletal muscle cannot fully recover from injury and wear and tear. We are using a mouse that carries the gene that causes the disease, DUX4, and have been using this mouse to investigate a genetic interaction with a pathway that controls cellular response to stress. In creating an effective mouse model to model FSHD, we hope to further our understanding in exactly how DUX4 operates to damage muscle.