**Differential Expression of Long Noncoding RNAs In Age-Related Macular Degeneration**

**ABSTRACT.**

It is now widely recognized that Long Noncoding RNAs (lncRNAs) play important roles in regulating gene expression and epigenetic state, and there is increasing recognition of the importance of lncRNAs in disease. Here we compare the expression of lncRNAs in normal human eyes, and eyes afflicted with Age-Related Macular Degeneration (AMD), by quantitating gene expression using the RNA-Seq high-throughput sequencing technique. Transcriptomes were evaluated for both normal and disease states, by tissue, and by disease phenotype. Our results suggest that lncRNAs that have demonstrated importance in regulating pathways important for the progression of AMD show significant differential expression as a function of disease state, tissue, and disease stage.

**INTRODUCTION.**