



SPRING 2021

**Biochemistry and Molecular Biology
Brown Bag Series**

Karleigh Kessler

Undergraduate Student

***“Genetic and small RNA contributions to motion
sickness susceptibility and physical training response”***

Tuesday, March 9, 2021

11:00 AM

**Please contact x3249 if you would like to attend but
did not receive an emailed link.**

Lab: Michael Markey, Ph.D.



Boonshoft
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<https://science-math.wright.edu/biochemistry-and-molecular-biology>

Genetic and small RNA contributions to motion sickness susceptibility and physical training response

The 3.2 billion base pairs of the human genome vary between individuals. Between populations, different alleles of any given gene may be in the majority. Hence, any reference genome is only an averaging of normal human genomes. For example, an estimated 33.8 million base pairs are different between individuals due to single nucleotide variants. Many of these SNP variants have been associated with diverse phenotypes. Additionally, sequence differences due to structural variation (duplications, deletions, inversions) between human genomes outnumber SNPs 7-to-1. Here, we investigate the association of SNPs with response to physical training. Additionally, we look for associations between motion sickness susceptibility, SNPs previously associated with susceptibility, microRNA expression, and a common structural variation in the gene *GSTM1*.