



**NIDDK P30 Center for Molecular Studies in Digestive and Liver Diseases  
Research Seminar**



**Nicholas Hand, PhD**

Research Assistant Professor, Department of Genetics  
Perelman School of Medicine, University of Pennsylvania

**" Identifying Regulatory Upstream ORFs as a Targetable Axis for Hereditary Diseases"**

**Thursday, May 16th, 2024**

**12:00 – 1:00 PM EST**

**Lunch is provided, all are invited.**

**901 Biomedical Research Building or <https://pennmedicine.zoom.us/j/92047751580>**

Dr. Hand will discuss how upstream open reading frames (uORFs) are short, putatively coding sequences in the 5'UTRs of many protein-coding genes from yeast to humans. While many of these elements are dispensable, some uORFs have a modulatory effect on the amount of the gene product (protein) from a given mRNA transcript. Dr Hand will present a research-in-progress update on a collaborative computational-experimental effort that originated in Penn's Biociphers Group (led by Dr Yoseph Barash). Together, the team aims to identify regulatory uORFs and define the magnitudes and directions of their effects; to discern the "rules" governing the impact of uORFs on protein output; and to identify candidate therapeutic targets of uORF-based intervention.

Please visit <https://www.med.upenn.edu/CMSDLLD/>  
for more information about past and future seminars.