

# *RNA Innovation Seminars*

**Monday, June 6, 2022 4:00 PM EST**  
**BSRB, ABC Seminar rooms (Hybrid)**



## *Long non- coding RNAs as evolutionarily fluid chromatin weavers*

**Selene Fernandez-Valverde, PhD**

Principal Investigator, LANGEBIO Cinvestav

### Abstract

Long non-coding RNAs (lncRNAs) have recently emerged as prominent elements of the regulatory transactions of eukaryotic genomes. Many of the known regulatory functions of lncRNAs in both animals and plants rely on the rearrangement of chromatin through direct interactions or recruitment of chromatin-modifying elements. In this talk, I will discuss the difficulty in identifying evolutionary conservation in lncRNAs, and how we characterize these evolutionarily volatile elements in the context of their role as regulators of the three-dimensional conformation of nuclear chromatin. I will focus on our findings resulting from the concurrent characterization of transcripts, tridimensional chromatin structure and direct RNA-DNA interactions in closely related plant species. I will also discuss how such techniques have vast potential to illuminate biomedically relevant lncRNAs when analyzed from a comparative genomics perspective.