Biophysics and Systems Biology Seminar Series

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SortSeq: Revealing the regulation of unexplored promoters

Abstract: Despite Escherichia coli being one of the most well-studied organisms, there remain many genes for which we know nothing about how they are regulated. The SortSeq project aims to probe these unexplored regulatory regions of the genome by taking a massively parallel reporter assay (MPRA) approach to evaluate a library of promoter mutants. These myriad of mutants can then be assayed for their ability to drive expression of an mRNA reporter, allowing us to infer how the DNA sequence ultimately relates to gene expression with basepair-by basepair resolution. These results provide us with putative transcription factor binding sites, which serves as a key first step in decoding the meaning of these previously unexplored regions of the genome.

Thursday, May 9th, 2019 at 10:00AM Natural Sciences II 3201

Hosts: Matt Bovyn and Professor Jun Allard

If you're interested in meeting with Suzy, please contact Matt Bovyn (mbovyn@uci.edu)