Chemical and Biological Engineering
Seminar Announcement

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“Transcriptional Programming - Engineering Intelligent Biological Systems”

December 7, 2020
12:00PM
https://tufts.zoom.us/j/96620654792
The control of gene expression is an important tool for metabolic engineering, the design of synthetic gene networks, and protein manufacturing. The most successful approaches to date are based on modulating mRNA synthesis via an inducible coupling to transcriptional effectors. Traditionally engineered genetic circuits have almost exclusively used naturally occurring transcription factors. The Wilson Lab has recently introduced a biological programming edifice based on an engineered system of non-natural transcription factors and complementary genetic architectures. This technology represents an important advance in synthetic biology via expanding biological computing capacity and lays the foundation for the development of a complete (non-natural) biological programming language.