

# Seminar

### Reprogramming Biology with an Engineering Language

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The molecular connectivity between genes and proteins inside a cell shows a good degree of resemblance with complex electrical circuits. This inspires the possibility of engineering a cell similar to an engineering device. Synthetic biology is an emerging field of bioengineering, where scientists use electrical and computer engineering principle to re-program cellular function for creating new cellular function with a potential to solve next generation challenges in medicine, energy, and space travel. In this talk, we discuss our synthetic biology efforts to build a technology platform for cellular robotics and systems biology effort to understand the effect of zero gravity on human and bacterial cells during space travel.

# Thursday, Sep 29<sup>th</sup> 2016

4:00 PM (Tea/Coffee at 3:45 PM)

Seminar Hall, TCIS