Dear Faculty, IGERT Fellows, IGERT Associates and Students,

You are cordially invited to attend a Seminar presented by Erica Freeman.

Please plan to attend.

Erica Freeman

IGERT Fellow

Date: Friday, February 6, 2015 Location: WCH 216 (VISLab) Time: 11:00am

The Role of Transcription Factors for Inducing Pluripotent Stem Cells.

Abstract:

The use of transcription factors to induce pluripotency has become routine. Despite cells being introduced to a cocktail of reprogramming factors, only a small percentage of somatic cells become pluripotent cells. Some questions lead to whether these transcription factors accelerate reprogramming by altering the cell cycle or by lowering reprogramming barriers. In fact, merely expressing transcription factors leads to small number of IPSC and the intermediate steps in reprogramming are essential to increase success in reprogramming. The role of chromatin repression plays a critical role in inhibiting reprogramming and must be considered as well. This paper discusses the role of overexpression of specific transcription factors and the machinery involved to lead to creation of IPSC.

