



UCI Samueli
School of Engineering

**Department of
Biomedical
Engineering**



Rusty Lansford, Ph.D.

University of Southern California,
Keck School of Medicine & Children's
Hospital Los Angeles

**“Illuminating the dynamic processes of
embryogenesis”**

Friday, November 13, 2015

4:00 – 5:00 p.m.

Donald Bren Hall, Room 1600
DBH 1600

Abstract: My group investigates the fundamental principles that guide how cells self-organize through collective interactions to bring about changes in embryonic form and function. We are interested in how molecules work together to control the timing and the spatial pattern of cell differentiation in developing tissues and stem cell systems. Over the past decade we developed transgenic, fluorescent protein (FP) expressing Japanese quail as an experimental system. We simultaneously developed state-of-the-art live cell and tissue imaging methodologies and use them to better understand the complex cellular processes underlying embryonic development and disease.

Biography: Rusty Lansford is an Associate Professor at the University of Southern California Keck School of Medicine & Children's Hospital Los Angeles. He received his Bachelor's degree in Microbiology from UC Berkeley, his Masters and PhD in Immunology from Columbia University with Prof. Fred Alt, and completed his postdoctoral training in Development Biology and Optics at Caltech with Prof. Scott Fraser. He is currently the Director of Molecular Imaging and of Gene Therapy and Viral Vector Core at Children's Hospital Los Angeles. He is the recipient of numerous awards, including the NASA Space Act Award for Two-photon Microscope Imaging Spectrometer for Multiple Fluorescent Probes. His research interests include biomedical optics, neural and vascular development and metabolic processes during development.



**Map to DBH:
Building # 314 on the UCI Campus Map**

Host is BME professor Elliot Botvinick, Ph.D.

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