



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY
Division of Life Science

LIFS Seminar Series

“EvoDevo and Epigenetics: Why the Embryo matters in Evolution”

delivered by

Prof. Paul G Layer

Developmental Biology and Neurogenetics
Technische Universität Darmstadt
GERMANY

Abstract

Eminent figures of neodarwinism had claimed that evolutionary theory does not need to consider the embryo (*"Blackboxing of embryology"*). But classic (neo) darwinistic teaching of evolution (also called *synthetic theory of evolution*) leaves essential questions unanswered. Evolution of new species can be better understood by a deeper understanding of the action of genes, as it is revealed by molecular Developmental Biology and Epigenetics. For instance, *mastergenes* are responsible to direct normal development of animal and human embryos. Their mutations can lead to malformations or death of the respective embryo, but in rare cases can bring forward new species. Thus, textbooks of Evolutionary Biology are presently supplemented by chapters on *EvoDevo*, teaching us that *Evolution* cannot be explained without *Developmental Biology*.

Date : 22 September 2017 (Friday)
Time : 4:00 p.m.
Venue : Padma & Hari Harilela Lecture Theatre (LT-C)
HKUST, Clear Water Bay, Kowloon

(Host faculty: Prof. Karl Tsim)

All are Welcome!