



Talent Development: Nurturing Creativity and Excellence

Distinguished Lecture for Gifted Students

(Saturday, 18 February 2017 14:00 – 16:30)

Title : **Building and Repairing Organs through Biotechnology: A New World for Inquisitive Minds**

Venue : Lecture Theatre 1, Esther Lee Building (利黃瑤璧樓), CUHK

Speaker : Professor Jose G. ASSOULINE

Professor Assouline is an accomplished and respected neuroscientist and biomedical engineer. His works at the University of Iowa and at the National Institutes of Health have provided the basis for his innovative research. He has sought to understand the inner workings of the nervous system and develop novel methods to peer into it. Through biochemical and imaging technics, he has made headway into the complex nature of the brain structure and function. His interests span a wide array of topics including: memory acquisition, storage, and retrieval. Alterations of these important processes will lead to life-changing and often irreversible deficits. However, the enablement to the learning of information will lead to the enhancement of knowledge. This is particularly the case for individuals with high potential for learning.

Abstract : The goal of this lecture is to offer a new direction to gifted students and young investigators with an interest in an exciting new field, regenerative biotechnology. Both the lay and scientific literature abound with news in regenerative biotechnology and the emerging multidisciplinary fields of biology, medicine, and engineering. There are great hopes for this merger to transform the ways we advance health and the quality of life for millions of people worldwide. In the lecture, we will explore practical ways to maximize the use of stem cells (immature organ-forming cells) through tissue engineering solutions. One example of such an organ is the brain with its complex networks; although the brain has been studied extensively, the conclusions of such studies are mottled with misconceptions. Multiple references will be made of biomaterials such as those designed to direct the organization, growth, and differentiation of cells in the process of forming functional organs. The concept of biomarkers and nanomedicine will be introduced. These technologies emphasize the notion that new materials can be engineered to be small enough to be powerful tools without interfering with normal biological conditions. The audience, future investigators, will be exposed to graduate-level information designed to stimulate their thinking about future careers.

Program :

Time	Content
14:00 – 14:15	Registration
14:15 – 14:30	Introduction
14:30 – 16:00	Presentation by Professor Jose G. ASSOULINE
16:00 – 16:20	Q & A
16:20 – 16:30	Round-up

香港中文大學校園地圖 CUHK Campus Map

指示 Guide :

前往**利黃瑤璧樓**，請於港鐵大學站（A 或 C 出口）沿左邊斜路步行 3-5 分鐘即可到達；毋須乘搭大學穿梭校車。

To **Esther Lee Building**, walk up (about 3 to 5 minutes) the slope on the left side of the MTR University Station (Exit A or C). No need to take shuttle bus.

