## iCeMS Seminar co-sponsored by Kyoto SMI & SDI **Global Industries Seminar** Global Industries, How we are trying to make open

#### innovation with academia?

14:00-14:30 Lecturer1: Dr. Tsuneaki Sakata Senior Fellow, Global Innovation Office, Shionogi & Co., Ltd.

#### "SHIONOGI SCIENCE PROGRAM -an industry-academic initiative for open innovation in pharmaceutical industry- "

Shionogi has a long history of building partnerships and collaborating with researchers in areas of interest and unmet medical need. As part of this wider goal, the Shionogi Science Program (SSP) was launched in the UK in 2011 following the success of the Japanese initiative FINDS (PHarma-INnovation Discovery competition Shionogi) which was founded in 2007. Shionogi's presence in Europe is growing and last year the SSP expanded to Australia, Belgium, Denmark, France, Germany, Ireland, Luxembourg and the Netherlands.

## 14:30-15:00 Lecturer2: Dr. Sotirios Karathanasis

MedImmune, Executive Director **Cardiovascular and Metabolic Diseases** 

## "Industry-academia collaborations: current trends and issues to overcome and opportunities offered by breakthroughs in stem cell

Although a variety of factors contribute to the productivity decline of the Pharmaceutical Industry (Pharma) in recent years, the declining ability to innovate is thought to play a fundamental role. This, so called "innovation deficit", occurs in the background of an accelerated pace of innovation in Academia. I will discuss possible factors responsible for this "innovation deficit" in Pharma and I will focus on elements that might prevent Academic innovations from effective translocation, internalization, and translation into new drug Discovery and Development projects in Pharma. I will emphasize the unique opportunities that recent breakthroughs in stem cell biology and regenerative medicine offer in this context.

### 15:00-15:30 Lecturer3: Mr. Joydeep Goswami President, Asia Pacific & Japan Life Sciences Solutions, **Thermo Fisher Scientific**

#### "Alternative models for Industry Academia partnerships"

As science gets more complicated and industry's appetite for risk is reduced due to financial pressures, industry academic collaborations are becoming more frequent and several new models are emerging. These models have evolved from the simple licensing and sponsored research models, to more complex ones that provide the ability to flex between custom projects for customers to longer term technology development collaborations. In some of these cases, governments are also helping fund these collaborations adding additional options to these relationships. The talk will discuss some of these models in more depth.

# 15:30-16:00 Coffee Break









# iCeMS Seminar co-sponsored by Kyoto SMI & SDI Presentation from Scotland Industries

16:00-16:30 Lecturer4: Dr. Colin Wilde Co-founder and Chief Scientific Officer AvantiCell Science Ltd



#### "Scottish Model for Industry Academia collaboration - Huma". Primary and Stem Cell-Based Analysis in Preclinical Drug Discovery"

Clinical therapy is being revolutionised by regenerative medicine and cell therapy, driven by advances in human cell biology. The same advances offer prospect of a step-change in therapeutic discovery, through introduction of highly-predictive preclinical cell-based analysis, which will reduce drug attrition in late-stage development and contribute substantially to healthcare economics through efficiency gains during new therapeutic development. This talk reviews human cell culture technologies leading this step-change, from cell banking to complex cell model development and the opportunities to apply advanced manufacturing technology in scalable production of user-friendly screening platforms. Technology development is illustrated by examples of industry-academia partnerships arising from AvantiCell Science's active engagement in national and pan-European research consortia.

### 16:30-17:00 Lecturer5: Mr. Niall Duxbury Distribution Manager and Product Specialist Arrayjet Ltd "Scottish model for Industry Academia collaboration for

Innovative microarray solutions, powered by inkjet technology'

Arrayjet, the inkjet microarray company, is the leading provider of inkjet microarray solutions to the biotech industry, academic researchers, and diagnostic companies worldwide. We offer a flexible, customer focussed contract service through Arrayjet Advance<sup>™</sup>, and an established range of scalable microarray instruments, maintenance support, accessories & consumables. Arrayjet's inkjet printing platform is most commonly used for rapid printing of microarrays including DNA, protein, cell lysates, serum and nanoparticles, but it has also been used to deliver reagents for non-microarray applications such as miniaturised PCR, lab on a chip and MEMS devices. More recently we have been approached to explore capabilities in cell printing and reverse transfection for stem cell differentiation, an area we are keen to expand. The patented technology utilises a unique combination of a multi-nozzle inkjet printhead (Xaar XJ126) with the JetSpyder<sup>™</sup> which automates loading of samples into the printhead. The industrial standard printhead offers enhanced reproducibility, speed and ease of use, whilst preventing nozzle clogging.

