

# **STEM CELL SOCIETY SEMINAR**

5 Aug 2013, Monday, Aspiration Theatrette, Matrix Building Level 2M 30 Biopolis Street, Singapore 138671

Programme	
14.00 - 14.10	Introduction of Leave a Nest by Andrew GUNG
14.10 - 15.00	Drs Shunji HATTORI & Kazumasa FUJITA Nippi Research Institute of Biomatrix
	"Advances on Technology for Matrix Research for Cell Culture'
15.00 onwards	Afternoon Tea (brought to you by " <i>Leave a Nest</i> ")
Hosted By	Jonathan LOH ExCo Member Stem Cell Society, and Principal Investigator, IMCB

# Abstract

Collagen is a major member of the Extracellular matrix (ECM) protein. On collagen coated dish, epithelial and endothelial cell can adhere via integrin receptor and flourish well. In fact, collagen can be used as a 3-dimensional substrate to mimic in vivo state. During this seminar, the speaker would discuss about collagen cell interaction and introduce some example of culture systems using collagen.

In the second part of the seminar, we explore on laminin 511 E8 fragment (iMatrix-511) which is the latest development for cell matrices. This work is a collaboration between Nippi and Dr. Sekiguchi from Osaka University. The speaker would introduce about the functions and unique features of iMatrix-511 and elaborate on how this substrate is also good for not only differentiated cells but also for stem cells

# **Biographies**



**Shunji Hattori** was born in Gifu, Japan, in1955. He studied biology of the hormone receptor in Shizuoka University. He then started graduate study of collagen biology at Tokyo medical and dental University and received a Ph.D. in 1985. He continued his work on collagen physiology and biochemistry as an assistant professor until 1989. From 1989, his research carrier began in Nippi Inc. Since then, he has been working on cell biology of extracellular matrix. During his career, from 1990 to 1993, he was in Fred Hutchinson cancer research center (Seattle, USA) as a visiting researcher. In 2008, he became the Director of Nippi Research institute of Biomatrix. The speaker is

also a Guest Professor at Tokyo agricultural and industrial University and the member of board of director of Japanese society of connective tissue research.



**Kazumasa Fujita** was born in Hiroshima, Japan, in 1982. He obtained his Bachelor of Science, Master of Science, and Doctor of Philosophy from the Hiroshima University in 2005, 2007, and 2010, respectively. His doctoral thesis was on "Studies on the functions of animal extracellular sulfatases in the regulation of growth factor signaling". After attaining his Ph.D. in 2010, he has been working in Nippi Research Institute of Biomatrix, Nippi, Incorporated to date.

# About Nippi Research Institute of BioMatrix

Nippi research Institute of BioMatrix which was established in 1938, is a key arm of Nippi Inc that is leading the area of collagen and its peptide studies. The main function of the Institute is to understand the precise functions of extracellular matrices, as well as to study the main components of collagen. We develop technically complex products that are the best-in-class, publish numerous scientific reports and patented methods concerning collagen bio-peptides while promoting the application development in numerous fields form food, health, pharmaceuticals to the cosmetics industries.

# About Leave a Nest, Co. Ltd

Leave a Nest, Co. Ltd., is a science venture company established 11 years ago with the vision to advance science and technology for global happiness. Today, we have 50 staffs from different specialty in sciences involving different projects from Science and Technology education, publications, research and development, human resource training, consultation, marketing and sales. Through these projects we have, throughout these years, formed networks with more than 200 companies, 1,700 teachers, 10,000 researchers in Japan. Recently, we have started to reach out to potential partners in South East Asia and America as well.