







TENTATIVE AGENDA

Joint French Japanese technology and bioengineering against liver disorders

International workshop on new micro technology and translational approaches for organ regeneration and cancer therapies

LIMMS and Sakai lab co-organized a CNRS-JSPS joint workshop in Tokyo on June 26th and 27th 2018. The goal is to promote exchanges and discussions between Japanese and French researchers on tissue engineering, organ on chip, biosensors and clinical translations. The clinical application focus during this workshop will be the liver disease, regeneration *via* iLite project including IIS, UTC and Villejuif hospital network, the cancer therapy and oncology *via* a focus on the SMMiLE project, a joint program of Centre Oscar Lambret hospital, Univ Lille, the CNRS and IIS.

Date: June 26th and 27th 2018

Place: IIS, The university of Tokyo, IIS A building, conference Hall

Workshop guest lists:

- Pr Inagaki (organ fibrosis)
- Pr Ochiya (liver stem cells)
- Pr Okitsu (clinical BioMEMS for cancer therapy, pancreas)
- Pr Miyajima (stem cells biology)
- Pr Duclos Vallee (hepatologist, Hepatinov director)
- Dr Collard (BioMEMS against cancer)
- Dr Bancaud (circulating micro DNA)
- Pr Le Goff (biology on chip)
- Dr Messina (liver biology)
- Pr Salles (bioprinting)
- Dr Tahran (BioMEMS for cancer therapy)

Workshop IIS / LIMMS lists

 Pr Takeuchi, Pr Tixier Mita, Pr Minami, Pr Sakai, Dr Pauty, Dr Leclerc, Pr Denoual, Dr Tauran, Dr Clement









★June 26th:

© Session-1: Clinical issues, chaired by Pr Miyajima

- 9h00-9h05 General welcome address by Pr Sakai
- 9h05-9h45 PLENARY LECTURE

Pathogenesis and Treatment of Liver Fibrosis by Prof Inagaki, (Tokai Univ.) 30min+10min question

9h45-10h15 PLENARY LECTURE

Unresolved issues in hepatolohy: help with bioengineering tools by Pr Duclos Vallee (Hopital Paul Brousse), 25min+5min question

10h15 – 10h45 Coffee break

© Session-2: Stem cell biology approaches, chaired by Dr Leclerc

10:45 – 11:25 PLENARY LECTURE

Chemically induced liver progenitors as a source for liver regeneration and drug screening by Pr Ochiya, (Tokyo Medical Univ.) 30min+10min question

- 11:25 11:50 Improved differentiation of human iPSC-derived Hepatoblasts into Hepatocyte-like cells in 3D culture through self-assembling process by Dr Messina (INSERM), 20min+ 5min question
- 11:50 12:15 Construction of liver tissue using iPS cells, by Pr Miyajima, (Univ Tokyo)
 20min+5min question
- 12:15 13:45 Group photo, lunch
- Session-3: Bio engineering technology approaches, chaired by Pr Sakai
- 13:45 14:10 PLENARY LECTURE

Technologies for residual DNA analysis: identification of biomarkers in blood plasma and detection of environmental threat with environmental DNA by Dr Bancaud, (CNRS) 20min+ 5min question

- 14:10 14:35 Microfluidic models of cells in the microcirculation by Pr Le Goff,
 (Univ Tech Compiegne) 20min+ 5min question
- 14:35 15:00 3D printed bio active nano fibers with anti-proliferative effect of hepatic cancer cell line by Pr Salles and Dr Tauran, (Univ Lyon) 20min+ 5min question
- 15h00 15h25 Cell fiber technology by Pr Takeuchi, (Univ of Tokyo)
 20min+ 5min question

- 15h25 16h00 Coffee break
- **◎** 16h00 17h00 Flash poster session/poster session
- 17h05-18h00 Informal discussion and closing
- 18h00 Banquet
- ★ June 27th: program:
- Session- 4: SMMiLE, chaired by Pr Kim
- 09:00 09:05 General welcome address by Pr Sakai
- © 09:10 09:35, PLENARY LECTURE
 - SMMiL-E program: International research program on Microsystems against Cancer by Pr Tahran/ Pr Okitsu (CNRS, Univ of Tokyo), 20min+5min question
- 09:35 09:55 Cellular evaluation and diagnostics by Pr Tahran (ISEN),
 15min+ 5min question,
 - 09:55 10:15 Microvessel-on-a-chip: towards the next generation of cancer drug efficacy tests Pr Matsunaga, Dr Pauty (Univ of Tokyo), 10min+ 5min question
- 10:15 10:30 Liver on chip relevant model for oncology application by
 Mathieu Danoy (CNRS), 10min+ 5min question
- Session-5 : Advanced Biosensors, chaired by Pr Tahran
- 11:00-11:20 Organic transistor based chemical sensors by Pr Minami,
 (Univ of Tokyo) 15min+5min, question
- 11:20-11h:00 Nanoscale transitors ion sensors by Dr Clement, (CNRS)
 15min+5min question
- 11:40-12:00 Bio-sensors Array Devices using Thin-Film-Transistor Technology by Pr Tixier Mita, (Univ of Tokyo) 15min+ 5min question
- 12:00-12:20 In-situ Transmission Electron Microscopy of specimens in liquid by Pr Denoual, (CNRS) 15min+ 5min question
- 12:30 13:50 lunch , room As 311-312
- **13:50 14:00 concluding remarks**
- © 14:00 17:30 Labs tour and scientific discussions

© 18:30 dinner

Sponsored by: JSPS , CNRS and IIS





