Invitation

2023. 12. 6 (Wednesday)
11:00 - 12:00

Speaker: **Asst. Prof. Yen-Liang (Allen) Liu**
Master Program of Biomedical Engineering
China Medical University (Taiwan)
Website: https://www.liuscience.net

Title: **Cancer diagnosis and therapy:**
Deep learning-assisted cytopathology and foam-based immunotherapy for intraperitoneal metastasis

In the first part, Prof. Liu will talk about the rapid and precise method he developed for the quantification of the biopsies' tumor content based on a deep learning-assisted cytopathological analysis model named Rapid On-Site cytopathological Examination incorporating Machine learning and Revised Yolo (ROSEMaRY), which can differentiate malignant biopsy from benign tissue with 92% accuracy.

In the second part, Prof. Liu will speak about a foam-based drug and cell delivery system named Immunofoam. This method is to greatly improve the present palliation or chemotherapy for treating peritoneal metastasis. The foam formulation enables drug carriers to conform to the tissue surface and immerse the cancer cells in therapeutic agents, extending the drug contact time. Immunofoam was combined with STING agonist for intraperitoneal injection with antigen-presenting cells and cytotoxic T cells, achieving significant therapeutic efficacy in murine tumor models.

Venue: **OIST Lab4 F01**

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