# Seminar

## Overview of Personalized Medicine Applied to Oncology and Novel Approach to Target Aggressive Cancer Cells

The Cancer Avatar Project in San Francisco is a multimodal approach which includes living biology, genomics, high-throughput pharmacologic screening, and informatics used to design individualized treatment options for fast growing solid tumors in patients who exhausted standard of care options. After quality control, tumor samples are sequenced to search for cancer-related mutations, and to identify which genes are driving the cancer process. We have also optimized sequencing of liquid biopsies that consist of circulating tumor DNA (ctDNA) obtained from patient's blood. Mutations identified in ctDNA can reflect alterations found in the primary tumor. This information is instrumental in designing treatment strategies in patients with recurrent or progressive disease. Besides screening conventional chemotherapeutic agents, we are also testing non-psychoactive, non-toxic, cannabinoid compounds. This type of compounds is now available in medical dispensaries in the USA and in Europe, and is being used by patients who are desperate to try novel approaches to treat their aggressive cancer. The discovery of the mechanisms of cannabinoid anti-metastatic activity is therefore urgently needed.

### Dr. Pierre-Yves Desprez

**Senior Scientist**
**California Pacific Medical Center,**
**San Francisco, USA**

**Time and Date**
**16:00-17:00**
**Thursday, April 20, 2023**

**Venue**
**Biken Hall, 1F Main building,**
**Research Institute for Microbial Diseases (RIMD)**

※ This seminar is a credit seminar for the Graduate School of Medicine and Graduate School of Frontier Biosciences

(No registration required)

**RIMD**
Research Institute for Microbial Diseases
大阪大学微生物病研究所

【Contact】
Eiji Hara
Dept. Molecular Microbiology
ehara@biken.osaka-u.ac.jp