

## “Deciphering Genome Big Data”



Opening Address    **Yoshinori Murakami**    (Dean of IMSUT)

### Plenary Lecture-1

Chair: Satoru Miyano    (IMSUT)



**Elizabeth Worthey** (HudsonAlpha Institute for Biotechnology, USA)  
Transformation of big data into clinically actionable knowledge;  
Driving the genomic medicine revolution

### Session-1: Cancer Genome and Beyond

Chair: Yoichi Furukawa    (IMSUT)



**Tatsuhiko Shibata** (IMSUT)  
Deconstruction of the cancer genome by mutational signature

**Yutaka Suzuki** (The University of Tokyo, Japan)  
Multi-omics analysis of cancer cells



### Session-2: Translation of Genome Data for the Diagnosis and Care of Patients

Chair: Tsuneo Ikenoue    (IMSUT)



**Yoichi Furukawa** (IMSUT)  
Identification of deleterious genetic changes in familial and rare cancers  
and application of their information for personalized healthcare

**Naomichi Matsumoto** (Yokohama City University, Japan)  
Rare variants in rare diseases



### Plenary Lecture-2

Chair: Tatsuhiko Shibata    (IMSUT)



**Mark Cowley** (Garvan Institute of Medical Research, Australia)  
Deciphering whole genome sequencing data, at scale, and in the clinic, for rare disease and  
cancer diagnosis

### Session-3: Genome Big Data and Healthcare

Chair: Kenta Nakai    (IMSUT)



**Jun Yasuda** (Tohoku University, Japan)  
Big data science with genome cohort: Tohoku Medical Megabank Project

**Yukinori Okada** (Osaka University, Japan)  
Statistical genetics, disease biology, and drug discovery





**Closing Address**

**Satoru Miyano**

**(IMSUT)**

**Chairs**



**Session-2**  
**Tsuneo Ikenoue**



**Session-3**  
**Kenta Nakai**

**Plenary Lecture-1**

