大学院生各位 To All Graduate Students

2023 年度 基盤医学特論 開講通知 Information on Special Lecture Tokuron 2023

題目:「台湾自己抗体バイオバンク構想」

Title: Taiwan Autoantibody Biobank Initiative

講師: Ann Chen 教授 花莲慈济医院 (Hualien Tzu Chi Hospital)

日時:令和6年1月26日(金) 16時30分~18時00分 Time and Date: From 16: 30~18:00, Friday Jan. 26, 2024

会場: 東山 EI 創発工学館3階 333 室

Room: Room 333, 3F, EI Emergent Engineering Building

Abstract Today, precision medicine has been thriving and robust worldwide. Medical studies have been carried out to precisely design therapeutic plans to gain maximum welfare for patients. For this purpose, world-famous research institutions have been implementing national-scale projects to collect health-relevant data, such as BioBank Japan (BBJ), the All of Us and CancerLinQ in the United States and the Genomics England and UK Biobank in the UK. In this regard, Taiwan holds its population with relatively homogeneous genetic background, secure and affordable national health insurance, wonderful medical care system with practical electronic medical records, and advanced information science, and thus constitutes a perfect location to actualize the precision medicine. As the leading medical center in the eastern Taiwan, Hualien Tzu Chi Hospital has launched the establishment of Taiwan Autoantibody Biobank Initiative, that will be a nation-wide core facility, to serve the academic community, research and development institutions, as well as the biotech/pharmaceutical industries with patients-derived autoantibodies, covering a wide range of autoimmune diseases and cancers. Importantly, it has gotten off to a very good start using two technical platforms to establish the unique autoantibodies and autoantigens of interest, including a SPYMEG-based human-hybridoma technology and phage-display system. Taking IgA nephropathy as an example, we have successfully isolated 21 such IgG autoantibodies and up to 140 IgA1 autoantigens, utilizing both SPYMEG-based human-hybridoma technology and phage-display system for the first time using the patients' peripheral blood mononuclear cells. For each of these autoantibodies, it has been studied about its binding affinity properties, glycan array binding profile, complex formation, kidney deposition, inflammation activation, gene analysis, and crystal structures.

Key words: Autoantibody; Autoantigen; Biobank; biotech/pharmaceutical industry; SPYMEG-based human-hybridoma technology; phage-display system; IgA nephropathy

https://zoom.us/j/93107492510?pwd=L2xNbXdwblJKdTJsSnRrallkaG8vUT09

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関係講座・部門の連絡担当者:分子細胞化学(生化学第二)岡島徹也 内 2070 Contact: 2070, Department of Biochemistry II 事前の申込は不要です。 No Registration required.

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