

第51回日本免疫学会学術集会

The 51st Annual Meeting of the Japanese Society for Immunology

スタンダード・バイオツールズ株式会社

(旧フリーダム株式会社)

共催セミナー

[会場] Room H (熊本城ホール 3F 会議室D1・2)

[日程] 2022年12月7日(水) 午前 11:45-12:45

Introduction



40+ true high-parameter imaging protein analyses

スタンダード・バイオツールズ株式会社
リージョナルマーケティングマネージャー
池田 理恵子

Main Seminar



New insights in the pathogenesis of atopic dermatitis and sarcoidosis

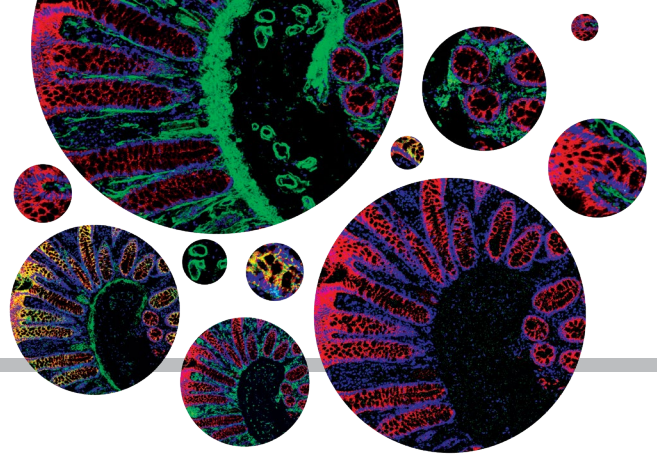
京都大学皮膚科学講座 教授
梶島 健治 先生

Moderator



大阪大学免疫学フロンティア研究センター 拠点長
大阪大学大学院医学系研究科免疫制御学 教授
竹田 潔 先生

- ※ 本大会の共催セミナーは、整理券をお持ちの方から優先入場となります。
- ※ セミナー会場にて整理券と引き換えでお弁当をお受けください。
- ※ 整理券の配布は、12月7日8:00~11:30に2階エントランス参加者受付付近(予定)にて行います。



Main Seminar Abstract



New insights in the pathogenesis of atopic dermatitis and sarcoidosis

京都大学皮膚科学講座 教授

椋島 健治 (Kenji Kabashima) 先生

Atopic dermatitis (AD) is a common skin disorder characterized by a complex and heterogeneous pathogenesis that includes skin barrier dysfunction, type 2 inflammation, and pruritus. When the skin barrier is disrupted by mutations in the filaggrin gene or environmental factors, the skin becomes more vulnerable to external stimuli. Exposure to protein antigens induces a Th2-dominant state. Subsequently, the Th2 cytokines IL-4 and IL-13, induce IgE class switch. In addition, Th2 cells produce IL-31, which induces itch. These findings suggest that type 2 inflammation leads to IgE induction, pruritus, and barrier dysfunction.

Sarcoidosis is an inflammatory disease associated with granulomas that appear in multiple organs. Here we analyzed macrophages in 3 cases of sarcoidosis of the skin using single-cell RNA-sequencing. We found that the number of *TREM2*-positive macrophages was increased in sarcoidosis compared to normal skin. These macrophages expressed genes such as *ACE* and *LYZ*, which are characteristics of sarcoidosis in humans. In addition, we found that the expression of genes involved in glucose metabolism was upregulated in *TREM2*-positive macrophages, and their expression was detected in granulomatous lesions by immunostaining.

In this seminar, we will provide novel findings of pathogenesis of AD and sarcoidosis.