## 第 558 回 難 研 セ ミ ナ ー 第 131 回 難治疾患共同研究拠点セミナー

下記により難研セミナーを開催しますので、多数御来聴下さい。

記

日 時: 平成29年3月30日(木)17:00~18:00

場 所: M&Dタワー21階 セミナー室

演 者: Dr. Philipp Yu

(Yu Philipps-Universität Marburg, Germany)

演 題: IgE Regulation:Then and Now

要言:Allergy is a common disease in all industrialized countries. Its symptoms can range from mild hayfever to life-threatning anaphylactic shock. A deregulated immunoglobulin E (IgE) response together with a Th-2 biased T cell response is at the core of the allergic immune response. However, basic research has still to gain a better understanding of fundamental regulations of the IgE B cell response, before better immunotherapy is available for patients. Here, I will discuss advances in genetic murine models for IgE and its low affinity receptor on B cells (CD23). In particular we will discuss recent findings that IgE expression on B cells results not in memory IgE<sup>+</sup> B cell generation, but rather in plasma cell formation or early cell death by apoptosis. This mechanism has been detected by Japanese scientists and could be confirmed by a novel IgE knock in mouse model we generated. In addition we will present recent data on CD23 function, which suggest that IgE is indeed regulated by a mechanism that modulates B cell receptor signaling.

連絡先:免疫疾患・安達貴弘 (内線 4591 )

共催:生体情報薬理学

The 558th Medical Research Institute Seminar

The 131th Joint Usage/Research Program of Medical Research Institute Seminar

Date:

2017.03.30

Venue: MD Tower 21th floor seminar room

Lecturer: Dr. Philipp Yu (Philipps-Universität Marburg, Germany)

Title: IgE Regulation: Then and Now

Summary: Allergy is a common disease in all industrialized countries. Its symptoms can range from mild hayfever to life-threatning anaphylactic shock. A deregulated immunoglobulin E (IgE) response together with aTh-2 biased T cell response is at the core of the allergic immune response. However, basic research has still to gain a better

understanding of fundamental regulations of the IgE B cell response, before better immunotherapy is available for patients. Here, I will discuss advances in genetic murine

models for IgE and its low affinity receptor on B cells (CD23). In particular we will discuss

recent findings that IgE expression on B cells results not in memory IgE+ B cell generation,

but rather in plasma cell formation or early cell death by apoptosis. This mechanism has

been detected by Japanese scientists and could be confirmed by a novel IgE knock in mouse model we generated. In addition we will present recent data on CD23 function, which

suggest that IgE is indeed regulated by a mechanism that modulates B cell receptor

signaling. These experiments are extended by a collaboration with Dr. Takahiro Adachi,

Tokyo Medical and Dental University, who will analyze Ca<sup>2+</sup> mobilization in vivo. Taken

together our data shed a new light on the various levels of IgE regulation.

Organizers: Department of Immunology, Takahiro Adachi (ext. 4591)

Co-organizer: Bio-informational Pharmacology