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RESEARCH TOPICS

The role for basophils in health and disease,

Primary immunodeficiency with allergy and Regulation of B cell development

EDUCATION

- 1972 - 1978 Tokyo Medical and Dental University School of Medicine MD. 1978.
1978 - 1980 Internship at Tsukuba University Hospital
1980 - 1984 Postgraduate, Department of Immunology, Faculty of Medicine, University of Tokyo, PhD., 1984.

POSITIONS

- 1984 – 1987 Scientific member, Basel Institute for Immunology, Basel, Switzerland
1987 - 1990 Research Associate, Department of Immunology,
Faculty of Medicine, University of Tokyo
1990 - 1995 Scientific member, Basel Institute for Immunology, Basel, Switzerland
1995 – 2000 Head, Department of Immunology,
The Tokyo Metropolitan Institute of Medical Science
2000 – present Professor and Chairman, Department of Immune Regulation
Tokyo Medical and Dental University
2008 – present Vice-trustee, Tokyo Medical and Dental University

MEMBERSHIP

- Japanese Society for Immunology (Board member)
- Japanese Society of Allergology (Board of representatives)
- The Japanese Society for Investigative Dermatology (Board member)
- Japanese Cancer Association
- The Molecular Biology Society of Japan
- Japanese Society of Hematology
- The American Association of Immunologists



PUBLICATION (recent, major)

1. Karasuyama, H., Mukai, K., Obata, K., Tsujimura, Y., and Wada, T.: Nonredundant roles of basophils in immunity. *Annu. Rev. Immunol.* 29: 45-69, 2011.
2. Saito, M., Nagasawa, M., Takada, H., Hara, T., Tsuchiya, S., Agematsu, K., Yamada, M., Kawamura, N., Ariga, T., Tsuge, I., Nonoyama, S., Karasuyama, H., and Minegishi, Y.: Defective IL-10 signaling in hyper-IgE syndrome results in impaired generation of tolerogenic dendritic cells and induced regulatory T cells. *J. Exp. Med.* 208: 235-249, 2011.
3. Karasuyama, H., Wada, T., Yoshikawa, S., and Obata, K.: Emerging roles of basophils in protective immunity against parasites. *Trends Immunol.* 32: 125-130, 2011.
4. Wada, T., Ishiwata, K., Koseki, H., Ishikura, T., Ugajin, T., Ohnuma, N., Obata, K., Ishikawa, R., Yoshikawa, S., Mukai, K., Kawano, Y., Minegishi, Y., Yokozeki, H., Watanabe, N., and Karasuyama, H.: Selective ablation of basophils in mice reveals their nonredundant role in acquired immunity against ticks. *J. Clin. Invest.* 120: 2867-2875, 2010.
5. Minegishi, Y., Saito, M., Nagasawa, M., Takada, H., Hara, T., Tsuchiya, S., Agematsu, K., Yamada, M., Kawamura, N., Ariga, T., Tsuge, I., and Karasuyama, H.: Molecular explanation for the contradiction between systemic Th17 defect and localized bacterial infection in hyper-IgE syndrome. *J. Exp. Med.* 206: 1291-1301, 2009.
6. Karasuyama, H., Mukai, K., Tsujimura, Y. and Obata, K.: Newly-discovered roles for basophils: a neglected minority gains new respect. *Nat. Rev. Immunol.* 9: 9-13, 2009.
7. Tsujimura, Y., Obata, K., Mukai, K., Shindou, H., Yoshida, M., Nishikado, H., Kawano, Y., Minegishi, Y., Shimizu, T. and Karasuyama, H.: Basophils play a pivotal role in immunoglobulin G- but not immunoglobulin E-mediated systemic anaphylaxis. *Immunity* 28: 581-589, 2008.
8. Minegishi, Y., Saito, M., Tsuchiya, S., Tsuge, I., Takada, H., Hara T., Kawamura, N., Ariga, T., Pasic, S., Stojkovic, O., Metin, A., and Karasuyama, H.: Dominant-negative mutations in the DNA-binding domain of STAT3 cause hyper-IgE syndrome. *Nature* 448: 1058-1062, 2007.
9. Minegishi, Y., Saito, M., Morio, T., Watanabe, K., Agematsu, K., Tsuchiya, S., Takada, H., Hara, T., Kawamura, N., Ariga, T., Kaneko, H., Kondo, N., Tsuge, T., Yachie, A., Sakiyama, Y., Iwata, T., Bessho, F., Ohishi, T., Joh, K., Imai, K., Kogawa, K., Shinohara, M., Fujieda, M., Wakiguchi, H., Pasic, S., Abinun, M., Ochs, H. D., Renner, E. D., Jansson, A., Belohradsky, B. H., Metin, A., Shimizu, N., Mizutani, A., Miyawaki, T., Nonoyama, S., and Karasuyama, H.: Human Tyk2 deficiency reveals requisite roles of Tyk2 in multiple cytokine signals involved in innate and acquired immunity. *Immunity* 25: 745-755, 2006.
10. Mukai, K., Matsuoka, K., Taya, C., Suzuki, H., Yokozeki, H., Nishioka, K., Hirokawa, K., Etori, M., Yamashita, M., Kubota, T., Minegishi, Y., Yonekawa, H., and Karasuyama, H.:



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