

## Dermatology

### 1. Staffs and Students (April 2009)

Professor	Hiroo YOKOZEKI	
Associate Professor	Takahiro SATOH	
Junior Associate Professor	Ken IGAWA,	Kaoru TAKAYAMA
Assistant Professor	Nobuhiko UEDA, Tomoko TANAKA	Aya NISHIZAWA,
Hospital Staff	Eishi TAKAHASHI, Chieko SHIMURA, Yuko TAKANO, Miyuki SAKAI,	Mami YUKAWA, Risa WATANABE, Ayako OOSHIO, Akiko FUJIWARA
Secretary	Yukako KIKUCHI	
Residents	Kouhei KATOU, Rie YU	Ai KUBOTA,
Graduate students	Naoko OKIYAMA, Akiko IMAI, Kazumi SAEKI , Yuki MATSUSHIMA, Yuichi ITO,	Tsukasa UGAJIN, Yoshihiro YAMAMOTO, Yuki TAKEHARA, Rika SEKINE, Yasumasa KANAI

### 2. Purpose of Education

Dermatology is a department of medical science which educates students to make a diagnosis and treatment for skin diseases. Main objective of Dermatology in the graduate course is to provide students opportunity to study advanced Immunodermatology, physiology, pathology and allergology, and also to study making diagnosis of skin diseases and operation techniques. Students are also taught on skin oncology (melanoma, angiosarcoma) and its related laboratory technology depending on their research project.

### 3. Research Subjects

- 1) Mechanisms of contact hypersensitivity
- 2) Pathological etiology of atopic dermatitis
- 3) Mechanisms of eosinophil recruitment to the skin
- 4) Roles of basophils in human skin diseases
- 5) Functional roles of PGD<sub>2</sub> and its receptors in allergic inflammation
- 6) Therapeutic approach for skin diseases by stable form of galectin-9
- 7) Therapeutic approach for scleroderma by decoy oligodeoxynucleotides
- 8) Analysis of pathological mechanisms of hyperhidrosis
- 9) Investigation of mediators for itch
- 10) Therapeutic approach for angiosarcoma with HVJ-E.
- 11) Pathological etiology of chronic prurigo

### 4. Clinical Services

Dermatology clinic provides an advanced treatment for skin diseases; skin tumors, infectious diseases, skin allergy, collagen diseases and psoriasis. Recently, we established the gene therapies (STAT6 decoy ODN) for severe atopic dermatitis in the clinic.

### 5. Publications

#### Original Article

1. Igawa K, Satoh T, Yokozeki H: A therapeutic effect of STAT6 decoy oligonucleotides ointment in atopic dermatitis: A pilot study in adults. *Br J Dermatol.* 160(5):1124-6, 2009.
2. Ugajin T, Kojima T, Mukai K, Obata K, Kawano Y, Eishi Y, Yokozeki H, Karasuyama H : Basophils preferentially express mouse mast cell protease 11 among the mast cell tryptase family in contrast to mast cells. *Journal of Leukocyte Biology.* 86(6):1417-25, 2009.

3. Okiyama N, Sugihara T, Iwakura Y, Yokozeki H, Miyasaka N, Kohsaka H: Therapeutic effects of IL-6 blockade on a murine model of polymyositis that does not require IL-17A. *Arthritis and Rheumatism*. 60(8):2505-12, 2009.
4. Satoh T, Shimura C, Miyagishi C, Yokozeki H: Indomethacin-induced reduction of CRTH2 in eosinophilic pustular folliculitis (Ofuji's disease): A proposed mechanism of action. *Acta Derm Venereol* (in press).
5. Shimura C, Satoh T, Takayama K, Yokozeki H: Methotrexate-related lymphoproliferative disorder with extensive vascular involvement in a patient with rheumatoid arthritis. *J Am Acad Dermatol* 61:126-129, 2009.
6. Shimura C, Satoh T, Igawa K, Aritake K, Urade Y, Nakamura M, Yokozeki H: Human dendritic cells express hematopoietic prostaglandin D synthase and function as a source of prostaglandin D2 in the skin. *Am J Pathol* (in press).
7. Tanaka T, Satoh T, Yokozeki H: Dental infection associated with nummular eczema as an overlooked focal infection. *J Dermatol* 36(8):462-5, 2009.
8. Tokoro S, Satoh T, Okubo Y, Igawa K, Yokozeki H: Latent dystrophic subcutaneous calcification in patients with chronic venous insufficiency. *Acta Derm Venereol*. 89(5):505-8, 2009.
9. Passeron T, Namiki T, Passeron H, Le Pape E, Hearing VJ: Forskolin protects keratinocytes from ultraviolet (UV) B-induced apoptosis and increases DNA repair. *J Invest Dermatol* 129:162-166, 2009.
10. Passeron T, Valencia JC, Namiki T, Vieria WD, Passeron H, Miyamura Y, Hearing VJ: Upregulation of SOX9 inhibits the growth of human and mouse melanomas and restores their sensitivity to retinoic acid. *J Clin Invest*. 119(4):954-963, 2009.
11. Nishigori K, Yamamoto T, Yokozeki H: Vesiculo-bullous dermatomyositis: report of three cases. *Dermatol Online J*, 15(4):6, 2009.
12. Nishizawa A, Nakano H, Satoh T, Takayama K, Sawamura D, Yokozaki H: Haber's syndrome may be a clinical entity different from Dowling-Degos disease. *Br J Dermatol*. 160(1):215-7, 2009.
13. Nishizawa A, Satoh T, Watanabe R, Takayama K, Nakano H, Sawamura D, Yokozeki H: Cowden syndrome: a novel mutation and overlooked glycogenic acanthosis in gingival. *Br J Dermatol*. 160: 1116-18, 2009.
14. Niwa H, Satoh T, Matsushima Y, Hosoya K, Saeki K, Niki T, Hirashima M, Yokozeki H: Stable form of galectin-9, a Tim-3 ligand, inhibits contact hypersensitivity and psoriatic reactions: a potent therapeutic tool for Th1- and/or Th17-mediated skin inflammation. *Clin Immunol*. 132(2):184-94, 2009.
15. Yamamoto T, Takayama K, Igawa K, Yamanaka M, Ueno M, Yokozeki H: Eruptive sebaceous hyperplasia in association with chronic renal failure. *Clin Exp Dermatol*. 34(7):244-5, 2009.
16. Yahara H, Satoh T, Miyagishi C, Yokozeki H: Increased expression of CRTH2 on eosinophils in allergic skin diseases. *J Eur Acad Dermatol Venereol* (Epub ahead of print)
17. Yukawa M, Satoh T, Takayama K, Yokozeki H: Cutaneous sarcoid reaction in a patient with bladder cancer. *Eur J Dermatol* (in press).
18. Zhou G, Dada LA, Wu M, Kelly A, Trejo H, Zhou Q, Varga J, Sznajder JI: Hypoxia-induced alveolar epithelial-mesenchymal transition requires mitochondrial ROS and hypoxia-inducible factor 1. *Am J Physiol Lung Cell Mol Physiol*. 297(6):1120-30, 2009.
19. Wu M, Melichian DS, de la Garza M, Gruner K, Bhattacharyya S, Barr L, Nair A, Shahrara S, Sporn PH, Mustoe TA, Tourtellotte WG, Varga J: Essential roles for early growth response transcription factor Egr-1 in tissue fibrosis and wound healing. *Am J Pathol*. 175(3):1041-55, 2009.
20. Bhattacharyya S, Ishida W, Wu M, Wilkes M, Mori Y, Hinchcliff M, Leof E, Varga J: A non-Smad mechanism of fibroblast activation by transforming growth factor-beta via c-Abl and Egr-1: selective modulation by imatinib mesylate. *Oncogene*, 28(10):1285-97, 2009.
21. Wu M, Melichian DS, Chang E, Warner-Blankenship M, Ghosh AK, Varga J: Rosiglitazone abrogates bleomycin-induced scleroderma and blocks profibrotic responses through peroxisome proliferator-activated receptor-gamma: *Am J Pathol*. 4(2):519-33, 2009.

#### Review Article

1. Ikuta T, Namiki T, Fujii-Kuriyama Y, Kawajiri K. AhR protein trafficking and function in the skin. *Biochem Pharmacol* 77(4):588-596, 2009.

#### Book