



## Conditions Treated:

## Research Areas:

- *Wound Healing*
- *Epidermal Barrier*
- *Cytokines*
- *Epithelial Cells*

## Programs & Services:

- *Division of Pediatric Allergy & Clinical Immunology*
- *Department of Pediatrics*

I have studied atopic dermatitis (AD) and allergic diseases. AD is the most common inflammatory skin disease which affects about 20% of children and 5% of adult. My researches focus on epidermal barrier and pathophysiology of AD. The skin epidermal barrier plays critical roles to prevent invasion of allergens into human body. Epidermal barrier defects are considered as an initial step for AD to develop and the most important pathologic findings in AD skin. Multiple factors including immune dysregulation, gene mutations, defects in terminal epithelial differentiation, antimicrobial peptides, altered composition of epidermal lipids, and skin microbiome may affect epidermal barrier function.

Additionally, I have interest in chronic non-healing wounds such as pressure ulcers, venous stasis ulcers, and diabetic wounds. The prevalence of chronic non-healing wounds is about 2% in the general population, and over twenty five billion dollars is spent annually in the United States for the medical management of non-healing wounds. Beneficial effects of plant extracts on wound healing and skin barrier function in skin disorders have been reported. I have been studying on wound healing using plant lipids.

## Board Certification

Pediatric Board, Korea

## Education

1985 - 1992 Inje University College of Medicine, Busan, Korea, Medicine (MD)  
2002 - 2005 Korea University, Seoul, Korea, Anatomy (PhD)

## Residency

1993 - 1997 Inje University Paik Hospital (Sanggye), Seoul, Korea, Pediatrics

## Fellowship

2000 - 2002 Inje University Paik Hospital (Sanggye), Seoul, Korea, Neonatology

2002 - Samsung Seoul Medical Center, Seoul, Korea, Pediatric allergy and respiratory disease  
2003  
2005 - National Jewish Health, Denver, CO, Post-Doctoral Research Fellow  
2010

### Teaching or Professional Positions

2013-2017: Instructor, Department of Pediatrics, National Jewish Health, Denver, CO  
2003-2005: Assistant Professor, Department of Pediatrics, Inje University Paik Hospital (Sanggye), Seoul, Korea

### Professional Memberships

AAAAI

### Awards & Recognition

2008: Research Excellence Award, American Academy of Allergy Asthma & Immunology

### Publications

Byung Eui Kim, Elena Goleva, Clifton Hall, Sang Hyun Park, Un Ha Lee, Donald Leung et al. Skin wound healing is accelerated by lipids from *Chamaecyparis Obtusa*. *J Invest Dermatol*, 2017.

Un Ha Lee, Byung Eui Kim, Donald Leung et al. Atopic dermatitis is associated with reduced corneodesmosin expression. *Br J of Dermatol* 2017 Feb; 176(2):537-540. PMID: 27572518.

Ji Hyun Kim, Byung Eui Kim, Donald Leung, Kangmo Ahn et al. Epidermal thymic stromal lymphopoietin predicts the development of atopic dermatitis during infancy. *J Allergy Clin Immunol* 2016; 137:1282-1285. PMID: 26879860.

Young-Min Ye, Byung Eui Kim, Youseb Shin, Hae-Sim Park, Donald Leung. Increased Epidermal Filaggrin in Chronic Idiopathic Urticaria is Associated with Severity of Urticaria. *Ann Allergy Asthma Immunol* 2014; 112:533-8. PMID: 24726196.

Byung Eui Kim, L Bin, Young-Min Ye, P Ramamoorthy, Donald Leung. IL-25 enhances HSV-1 replication by inhibiting filaggrin expression, and acts synergistically with Th2 cytokines to enhance HSV-1 replication. *J Invest Dermatol* 2013;133: 2678-85. PMID: 23657503.

### Doctor's Contact Information

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