

## Hye Young Kim, Ph.D

Professor,  
Department of Medical science,  
Seoul National University College of Medicine and Hospital  
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### PROFESSIONAL EXPERIENCES

Professor	Mar.2021 - present
Seoul National University College of Medicine, Department of medical science	
Associate professor	Mar.2014 - Feb.2021
Seoul National University College of Medicine, Department of medical science	
Instructor (Research Associate)	Feb.2011 - July.2013
Boston Children's Hospital/Harvard Medical School.	
Research fellow	Oct.2006 - Feb.2011
Boston Children's Hospital/Harvard Medical School	
Advisor: Prof. Dale. T. Umetsu M.D., Ph.D.	

### EDUCATION

Seoul National University College of Medicine, Ph.D. in Immunology	Feb.2003 - Aug.2006
Thesis: The roles of NKT cells in auto-antibody induced arthritis.	
Advisor: Prof. Doo-Hyun Chung, M.D., Ph.D.	
Seoul National University, M.S in Genetics	Feb.2001 - Aug.2003
Thesis: The study on molecular mechanisms of the transcriptional activators which regulate the <i>STA</i> gene expression in <i>Saccharomyces cerevisiae</i> .	
Advisor: Prof. Hyen-Sam Kang, Ph.D.	
Ewha Womans University , B.S. in Biology	Mar.1997- Feb.2001

### HONORS and AWARDS

Blue Ribbon Recturer (Korean Society for Molecular and Cellular Biology)	2022
Young Scientist award (Seoul National University College of Medicine)	2021
Genexine excellence award (The Korean Association of Immunologist)	2021
Excellent Research Achievement Professor (Seoul National University College of Medicine)	2020
Excellent Research Achievement Professor (Seoul National University College of Medicine)	2019
Excellent paper award (Korean Association of Immunologist)	2016
Excellent Research Achievement Professor (Seoul National University College of Medicine)	2015
L'Oréal-UNESCO Awards for Women in Science (Korea)	2014
Houseofficer development award (CHB/Harvard Medical School)	2010

## ACADEMIC ACTIVITIES

Editorial Board Member, <i>Molecules and cells</i>	2021-
<i>Frontiers in Immunology</i> , Review editor	2021-
Editorial Board Member, <i>Asthma allergy&amp; Immunology research</i>	2021-
Academic Member, Korean Society of Biochemistry and Molecular Biology	2021
Member, Young Korean Academy of Science and Technology	2020-
Academic Committee, The Federation of Immunological Societies of Asia-Oceania (FIMSA)	2021
Operating Committee, Korean Society of Biochemistry and Molecular Biology	2019
Board of Education, Women's Life Science Technology Forum	2018-2019
Academic Committee, The Korean Association of Immunologist	2017-2019
Member of public relations committee, Korean Society of Biochemistry and Molecular Biology	2017
Editorial Board Member, Korean Society for Molecular and Cellular Biology	2015

## SELECTED PUBLICATIONS

- [1] Ham JH, Kim JH, Shon KH, Park IW, Choi BW, Chung DH, Cho SH, Kang HR, Jung JW\*, **Kim HY\***. Cigarette smoke aggravates asthma by inducing memory-like type 3 innate lymphoid cells (*Nat Commun.* 2022 Jul 4;13(1):3852. doi: 10.1038/s41467-022-31491-1.)
- [2] Ryu SW, Shin JW, Kwon S, Lee J, Kim YC, Bae YS, Bas YS, Kim DK, Kim YS, Yang SH\*, **Kim HY\***. Siglec-F-expressing neutrophils are essential for creating a 3 pro-fibrotic microenvironment in the renal fibrosis (*J Clin Invest.* 2022. <https://doi.org/10.1172/JCI156876>)
- [3] Ko YG, Kim, MH, Park JY, Gil CH, Kim TS, Choi JY, Chung DH, Kim HK, Kim DY\*, **Kim HY\***. Chronic rhinosinusitis endotypes associate with distinct local cytokine milieu that shape the distribution of innate lymphoid cells. (*Allergy* . 2022 Mar 31. doi: 10.1111/all.15300)
- [4] Shin JW, Kim, JH, Ham S, Choi, SM, Lee CH, Lee JC, Kim JH, Cho SH, Kang HR, Kim YM, Chung DH, Chung Y, Bae YS, Bae YS, Roh TY, Kim T, **Kim HY\***. A unique population of neutrophils generated by air pollutant-induced lung damage exacerbates airway inflammation (*J Allergy Clin Immunol* 2021 Oct 12;S0091-6749(21)01520-7).
- [5] Kim JH, Shin JW, Lee HJ, Kim JH, Choi SM, Lee CH, Kang HR, Park SH, Bae YS, Chung DH, **Kim HY\***. Serum amyloid A promotes emphysema by triggering the reciprocal activation of neutrophils and ILC3s. (*Clin Transl Med.* 2021 Dec;11(12):e637. doi: 10.1002/ctm2.637. IF 11.492)
- [6] Kim JH, Chang Y, Bae B, Sohn KH, Cho SH, Chung DH, Kang HR\*, **Kim HY\*** Innate immune crosstalk in asthmatic airways: innate lymphoid cells coordinate the polarization of lung macrophage. (*J Allergy Clin Immunol.* 2019 May;143(5):1769-1782.e11. doi: 10.1016/j.jaci.2018. IF 10.79)
- [7] Kim J, Kim YC, Ham J, Sohn KH, Lee SY, Chung DH, Cho SH, Kang HR\*, **Kim HY\***. The effect of air pollutants on airway innate immune cells in patients with asthma. (*Allergy.* 2020 Sep;75(9):2372-2376. doi: 10.1111/all.14323)

## PUBLICATIONS

### 2022

[80] Ham JH, Kim JH, Ko YG, **Kim HY\***. The Dynamic Contribution of Neutrophils in the Chronic Respiratory Diseases (*Allergy Asthma Immunol Res.* 2022 Jul;14(4):361-378. doi: 10.4168/aaair.2022.14.4.361.)

[79] Ham JH, Kim JH, Shon KH, Park IW, Choi BW, Chung DH, Cho SH, Kang HR, Jung JW\*, **Kim HY\***. Cigarette smoke aggravates asthma by inducing memory-like type 3 innate lymphoid cells (*Nat Commun.* 2022 Jul 4;13(1):3852. doi: 10.1038/s41467-022-31491-1.)

[78] Ko YG, Kim, MH, Park JY, Gil CH, Kim TS, Choi JY, Chung DH, Kim HK, Kim DY\*, **Kim HY\***. Chronic rhinosinusitis endotypes associate with distinct local cytokine milieu that shape the distribution of innate lymphoid cells. (*Allergy* . 2022 Jul. 77, 7, p. 2246-2250. doi: 10.1111/all.15300)

[77] Ryu SW, Shin JW, Kwon S, Lee J, Kim YC, Bae YS, Bas YS, Kim DK, Kim YS, Yang SH\*, **Kim HY\***. Siglec-F-expressing neutrophils are essential for creating a 3 pro-fibrotic microenvironment in the renal fibrosis (*J Clin Invest.* 2022. Jun 132, 12, e156876 <https://doi.org/10.1172/JCI156876>)

[76] Shin JW, Kim, JH, Ham S, Choi, SM, Lee CH, Lee JC, Kim JH, Cho SH, Kang HR, Kim YM, Chung DH, Chung Y, Bae YS, Bae YS, Roh TY, Kim T, **Kim HY\***. A unique population of neutrophils generated by air pollutant-induced lung damage exacerbates airway inflammation (*J Allergy Clin Immunol.* 2022 Apr;149(4):1253-1269.e8. doi: 10.1016/j.jaci.2021.09.031)

[75] Kang H, Bang JY, Mo Y, Shin JW, Bae B, Cho SH, **Kim HY**, Kang HR. Effect of *Acinetobacter lwoffii* on the modulation of macrophage activation and asthmatic inflammation. (*Clin Exp Allergy.* 2022 Apr;52(4):518-529. doi: 10.1111/cea.14077)

[74] Ham JH, Shin JW, Ko BC, **Kim HY\***. Targeting the Epithelium-Derived Innate Cytokines: From Bench to Bedside. (*Immune Netw.* 2022 Feb 22;22(1):e11. doi: 10.4110/in.2022.22.e11)

[73] Chang Y, Kang JS, Jung K, Chung DH, Ha SJ, Kim YJ, **Kim HY\***. OASL1-mediated inhibition of type I IFN reduces influenza A infection-induced airway inflammation by regulating ILC2s (*Allergy Asthma Immunol Res.* 2022 Jan;14(1):99-116. doi: 10.4168/aaair.2022.14.1.99)

[72] YC Kim, S Choi, KH Sohn, JY Bang, Y Kim, JW Jung, **Kim HY**, J Park, K Kim, MG Kang, MS Yang, S Kim, SH Kim, JH Choi, HJ Park, SM Lee, SH Kim, JW Park, JM Lee, SH Cho, S Won, H Yi, HR Kang *Selenomonas*: A marker of asthma severity with the potential therapeutic effect. *Allergy.* Jan 2022 p.317-320 doi: 10.1111/all.15114.

### 2021

[71] Kim JH, Shin JW, Lee HJ, Kim JH, Choi SM, Lee CH, Kang HR, Park SH, Bae YS, Chung DH, **Kim HY\***. Serum amyloid A promotes emphysema by triggering the reciprocal activation of neutrophils and ILC3s. (*Clin Transl Med.* 2021 Dec;11(12):e637. doi: 10.1002/ctm2.637.)

[70] Kim DM, Kim Y, Seo JW, Lee J, Park U, Ha NY, Koh JM, Park H, Lee JW, Ro HI, Yun NR, Kim DY, Yoon SH, Na YS, Moon DS, Lim SC, Kim CM, Jeon K, Kang JG, Jang NY, Jeong H, Kim J, Cheon S, Sohn K, Moon KY, Kym S, Han SR, Lee MS, Kim HJ, Park UY, Choi JY, Shin HW, **Kim HY**, Cho JH, Jeon YK, Kim YS, Cho NH. Enhanced eosinophil-mediated inflammation associated with antibody and complement-dependent pneumonic insults in critical COVID-19 (*Cell Rep.* 2021 Oct 5;37(1):109798. doi: 10.1016/j.celrep.2021)

# Hye Young Kim Ph.D. Curriculum Vitae

- [69] Jung, JW, Oh, JS, Bae, B, Ahn, YH., Kim, LW, Choi, J, **Kim HY**, Kang, HR, Lee, CH Ultra-high-resolution computed tomography shows changes in the lungs related with airway hyperresponsiveness in a murine asthma model *Dec 2021*, In: *Scientific Reports*. 11, 1, 17584.
- [68] JS Ko, D Jeong, J Koh, H Jung, KC Jung, YK Jeon, **Kim HY**, EC Yi, H Lee, CW Lee, DH Chung Ssu72 phosphatase directly binds to ZAP-70, thereby providing fine-tuning of TCR signaling and preventing spontaneous inflammation *Proc Natl Acad Sci U S A*. 2021 Aug 31;118(35):e2102374118. doi: 10.1073/pnas.2102374118.
- [67] Park B, Lee M, Kim SD, Jeong YS, Kim JC, Yang S, **Kim HY**, Bae YS. Activation of formyl peptide receptor 1 elicits therapeutic effects against collagen-induced arthritis. *Journal of Cellular and Molecular Medicine* <https://doi.org/10.1111/jcmm.16854>
- [66] Ham JH, Kim JH, Choi SM, Park JH, Baek MG, Kim YC, Sohn KH, Cho SH, Yang SY, Bae YS, Chung DH, Won S, Yi H, Kang HR, **Kim HY\*** The interaction between NCR<sup>+</sup>ILC3s and the microbiome in the airway shapes asthma exacerbations *Immune Netw*. 2021 Aug;21(4):e25
- [65] Chang Y, Kim JW, Yang S, Chung DH, Ko JS, Moon JS, **Kim HY\***. GM-CSF-producing NCR<sup>+</sup> ILC3s directly activate neutrophils in the intestinal mucosa of inflammatory bowel disease. *Clin Transl Immunology*. 2021 Jul 8;10(7):e1311. doi: 10.1002/cti2.1311
- [64] Shin JW, Ryu S, Ham J, Lee S, Chung DH, Kang HR, **Kim HY\***. Mesenchymal Stem Cells Suppress Severe Asthma by Directly Regulating Th2 Cells and Type 2 Innate Lymphoid Cells *Mol. Cells* 2021; 44(8): 580~590. <https://doi.org/10.14348/molcells.2021.0101>
- [63] Jeong DJ, Kim HS, **Kim HY**, Kang MJ, Jung H, Oh Y, Kim DJ, Koh J, Cho SY, Jeon YK, Lee EB, Lee SH, Shin EC, Kim HM, Yi E, Chung DH. Soluble Fas ligand drives autoantibody-induced arthritis by binding to DR5/TRAIL-R2 *eLife* DOI: 10.7554/eLife.48840
- [62] Kim JH, Ryu S, **Kim HY\***. Innate Lymphoid Cells in Tissue Homeostasis and Disease Pathogenesis. *Mol. Cells* 2021; 44(5): 301-309
- [61] An JN, Ryu S, Kim YC, Yoo KD, Lee J, **Kim HY**, Lee HJ, Lee JP, Lee JW, Jeon US, Kim DK, Kim YS, Yang SH. NK1.1–natural killer T cells upregulate interleukin-17 expression in experimental lupus nephritis. *Am J Physiol Renal Physiol* . 2021 May 1;320(5):F772-F788.
- [60] BS Kim, DS Kuen, CH Koh, HD Kim, SH Chang, S Kim, YK Jeon, YJ Park, G Choi, J Kim, KW Kang, **Kim HY**, SJ Kang, S Hwang, EC Shin, CY Kang, Chen Dong and YS Chung. Type 17 immunity promotes the exhaustion of CD8 + T cells in cancer *Jun 2021*, In: *Journal for ImmunoTherapy of Cancer*. 9, 6, e002603.

## 2020

- [59] Yoon S, Song SC, Shin JW, Kang Sini, **Kim HY\***, You HJ (\*Co-corresponding authors). Protective Effects of Korean Herbal Remedy against Airway Inflammation in an Allergic Asthma by Suppressing Eosinophil Recruitment and Infiltration in Lung. *Antioxidants* 2020 Dec 23;10(1):E6.
- [58] Sohn KH, Baek MG, Choi SM, Bae B, Kim RY, Kim YC, **Kim HY**, Yi H, Kang HR. Alteration of lung and gut microbiota in IL-13-transgenic mice simulating chronic asthma. *J. Microbiol. Biotechnol*. 2020; 30(12): 1819-1826
- [57] Park MY, Kim HS, Jeong YS, **Kim HY**, Bae YS Novel Sca-1<sup>+</sup> macrophages modulate the pathogenic progress of endotoxemia. *Biochem Biophys Res Commun*. 2020 Sep 10:S0006-291X(20)31726-5. doi: 10.1016/j.bbrc.2020.08.118.

# Hye Young Kim Ph.D. Curriculum Vitae

- [56] Woo YD, Koh J, Ko JS, Kim S, Jung KC, Jeon YK, [Kim HY](#), Lee H, Lee CW, Chung DH. Ssu72 regulates alveolar macrophage development and allergic airway inflammation by fine tuning of GM-CSF receptor signaling. *J Allergy Clin Immunol*. 2020 Sep 7;S0091-6749(20)31235-5. doi: 10.1016/j.jaci.2020.07.038
- [55] Son J, Cho JW, Park HJ, Moon J, Park S, Lee H, Lee J, Kim G, Park SM, Lira SA, McKenzie A, [Kim HY](#), Choi CY, Lim YT, Park SY, Kim HR, Park SH, Shin EC, Lee I, Ha SJ. Tumor-Infiltrating Regulatory T Cell Accumulation in the Tumor Microenvironment is Mediated by IL33/ST2 Signaling. *Cancer Immunol Res*. 2020 Sep 2;canimm.0828.2019. doi: 10.1158/2326-6066.CIR-19-0828.
- [54] Kim J, Kim YC, Ham J, Sohn KH, Lee SY, Chung DH, Cho SH, Kang HR\*, [Kim HY\\*\\*](#) (Co-corresponding authors). The effect of air pollutants on airway innate immune cells in patients with asthma. *Allergy*. 2020 Sep;75(9):2372-2376. doi: 10.1111/all.14323.
- [53] Sohn KH, Ham J, Chung SJ, Kang HR\*, [Kim HY\\*](#) (Co-corresponding authors). Analysis of Innate and Adaptive Immunological Characteristics in Patients with IgG4-Related Disease. *Int Arch Allergy Immunol*. 2020;181(10):807-812. doi: 10.1159/000508699.
- [52] Kim MH\*, Jin SP\*, Jang SH, Choi JY, Chung DH, Lee DH, Kim KH<sup>†</sup>, [Kim HY<sup>†</sup>](#) (Co-corresponding authors) IL-17A producing innate lymphoid cells promote skin inflammation by inducing IL-33 driven type 2 immune responses. *J Invest Dermatol*. 2020 Apr;140(4):827-837.e9. doi: 10.1016/j.jid.2019.08.447. Epub 2019 Oct 16.
- [51] Ryu S, Lee EY, Kim DK, Kim YS, Chung DH, Kim JH, Lee H\*, [Kim HY\\*](#) (Co-corresponding authors). Reduction of circulating innate lymphoid cell progenitors results in impaired cytokine production by innate lymphoid cells in patients with lupus nephritis. *Arthritis Res Ther*. 2020 Mar 29;22(1):63. doi: 10.1186/s13075-020-2114-5.
- [50] Kang LJ, Oh E, Cho C, Kwon H, Lee CG, Jeon J, Lee H, Choi S, Han SJ, Nam J, Song CU, Jung H, [Kim HY](#), Park EJ, Choi EJ, Kim J, Eyun SI, Yang S. 3'-Sialyllactose prebiotics prevents skin inflammation via regulatory T cell differentiation in atopic dermatitis mouse models. *Sci Rep*. 2020 Mar 27;10(1):5603. doi: 10.1038/s41598-020-62527-5.
- [49] Shim JS, Lee HS, Park DE, Lee JW, Bae BR, Chang Y, Kim JH, [Kim HY\\*](#), Kang HR\* (Co-corresponding authors) Aggravation of asthmatic inflammation by chlorine exposure *via* innate lymphoid cells and CD11cintermediate macrophages. *Allergy*. 2020 Feb;75(2):381-391. doi: 10.1111/all.14017. Epub 2019 Sep 9.
- [48] Kang SY, Kim J, Ham J, Cho SH, Kang HR, [Kim HY](#) Altered T cell and monocyte subsets in prolonged immune reconstitution inflammatory syndrome related with DRESS (drug reaction with eosinophilia and systemic symptoms). *Asia Pac Allergy*. 2020 Jan 17;10(1):e2. doi: 10.5415/apallergy.2020.10.e2. eCollection 2020 Jan.

## 2019

- [47] Lee S, Koh J, Chang Y, [Kim HY](#), Chung DH. Invariant NKT Cells Functionally Link Microbiota-Induced Butyrate Production and Joint Inflammation. *J Immunol*. 2019 Dec 15;203(12):3199-3208. doi: 10.4049/jimmunol.1801314. Epub 2019 Nov 15. PMID: 31732526
- [46] Kim D, Koh J, Ko JS, [Kim HY](#), Lee H, Chung DH. Ubiquitin E3 Ligase Pellino-1 Inhibits IL-10-mediated M2c Polarization of Macrophages, Thereby Suppressing Tumor Growth. *Immune Netw*. 2019 Oct 17;19(5):e32. doi: 10.4110/in.2019.19.e32. eCollection 2019 Oct.
- [45] Koh J, [Kim HY](#), Lee Y, Park IK, Kang CH, Kim YT, Kim JE, Choi M, Lee WW, Jeon YK, Chung DH. IL23-Producing Human Lung Cancer Cells Promote Tumor Growth via Conversion of Innate Lymphoid Cell 1 (ILC1) into ILC3. *Clin Cancer Res*. 2019 Jul 1;25(13):4026-4037. doi: 10.1158/1078-0432.CCR-18-3458. Epub 2019 Apr 12.

# Hye Young Kim Ph.D. Curriculum Vitae

[44] Yu S, Leung KM, **Kim HY**, Umetsu SE, Xiao Y, Albacker LA, Lee HJ, Umetsu DT, Freeman GJ, DeKruyff RH Blockade of Repulsive guidance molecule b (RGMB) inhibits allergen-induced airways disease. *J Allergy Clin Immunol*. 2019 Jul;144(1):94-108.e11. doi:10.1016/j.jaci.2018.12.1022.

[43] Kim JH, Chang Y, Bae B, Sohn KH, Cho SH, Chung DH, Kang HR\*, **Kim HY\***(\*Co-corresponding authors) Innate immune crosstalk in asthmatic airways: innate lymphoid cells coordinate the polarization of lung macrophage. *J Allergy Clin Immunol*. 2019 May;143(5):1769-1782.e11. doi: 10.1016/j.jaci.2018.

## **2018**

[42] Woo YD, Koh JM, Kang HR, **Kim HY**, Chung DH. The invariant natural killer T cell-mediated chemokine X-C motif chemokine ligand 1-X-C motif chemokine receptor 1 axis promotes allergic airway hyperresponsiveness by recruiting CD103dendritic cells. *J Allergy Clin Immunol*. 2018 Dec;142(6):1781-1792.e12. doi: 10.1016/j.jaci.2017.12.1005. Epub 2018 Feb 21.

[41] Ryu SW, Park JS, **Kim HY\***, Kim JH\* (\*Co-corresponding authors) Lipid-reactive T Cells in Immunological Disorders of the Lung. *Frontiers in immunology* 2018 Sep 26;9:2205.

[40] BB Lee, AH Choi, JH Kim, YK Jun, HJ Woo, SD Ha, CY Yoon, JT Hwang, Lars Steinmetz, Stephen Buratowski, SH Lee, **Kim HY\***, TS Kim\* (\*Co-corresponding authors) Rpd3L HDAC links H3K4me3 to transcriptional repression memory. *Nucleic Acids Res*. 2018 Sep 19;46(16):8261-8274. doi: 10.1093/nar/gky573.

[39] An S, Jeon YJ, Jo A, Lim HJ, Han YE, Cho SW, **Kim HY**, Kim HJ. Initial Influenza Virus Replication Can Be Limited in Allergic Asthma Through Rapid Induction of Type III Interferons in Respiratory Epithelium. *Front Immunol*. 2018 May 17;9:986. doi: 10.3389/fimmu.2018.00986

[38] Jeong DJ, **Kim HY**, Chung DH. Sodium chloride inhibits IFN- $\gamma$ , but not IL-4, production by invariant NKT cells. *J Leukoc Biol*. 2018 Jan;103(1):99-106. doi: 10.1002/JLB.3A0217-076R. Epub 2017 Dec 19.

## **2017**

[37] Ko JS, Koh JM, So JS, Jeon YK, **Kim HY**, Chung DH Palmitate inhibits arthritis by inducing t-bet and gata-3 mRNA degradation in iNKT cells via IRE1a-dependent decay. *Sci Rep*. 2017 Nov 2;7(1):14940. doi: 10.1038/s41598-017-14780-4.

[36] Chang YN, Kang SY, Kim JH, Kang HR, **Kim HY\*** Functional Defects in Type 3 Innate Lymphoid Cells and Classical Monocytes in a Patient with Hyper-IgE Syndrome. *Immune Netw* 2017 Oct;17(5):352-364

[35] Kim DH, Lee Ho, Koh JM, Ko JS, Yoon BR, Jeon YK, Cho YM, Kim TH, Suh YS, Lee HJ, Yang HK, Park KS, **Kim HY**, Lee CW, Lee WW, Chung DH Cytosolic Pellino-1-Mediated K63-Linked Ubiquitination of IRF5 in M1 Macrophages Regulates Glucose Intolerance in Obesity. *Cell Rep*. 2017 Jul 25;20(4):832-845. doi: 10.1016/j.celrep.2017.06.088.

[34] **Kim HY** Resveratrol in Asthma: A French Paradox? *Allergy Asthma Immunol Res* 2017 1;9:1-2

[33] Lee HS, Park DE, Lee JW, Chang YN, **Kim HY**, Song WJ, Kang HR, Park HW, Chang YS, Cho SH IL-23 secreted by bronchial epithelial cells contributes to allergic sensitization in asthma model: role of IL-23 secreted by bronchial epithelial cells. *Am J Physiol Lung Cell Mol Physiol*. 2017 Jan 1;312(1):L13-L21. doi: 10.1152/ajplung.00114.2016. Epub 2016 Nov 18.

## **2016**

[32] **Kim HY**, Umetsu DT, Dekruyff RH Innate lymphoid cells in asthma: Will they take your breath away? *Eur J Immunol*. 2016 Apr;46(4):795-806.

## **2015**

# Hye Young Kim Ph.D. Curriculum Vitae

[31] Lee HS, Kwon HS, Park DE, Woo YD, **Kim HY**, Kim HR, Cho SH, Min KU, Kang HR, and Chang YS. Thalidomide inhibits alternative activation of macrophages in vivo and in vitro: a potential mechanism of anti-asthmatic effect of thalidomide. *PLoS One*. 2015 Apr 23;10(4):e0123094.

## 2014

[30] Woo Y, Jeong D, Chung DH, **Kim HY\***. The Roles of Innate Lymphoid Cells in the Development of Asthma *Immune Netw*. 2014 Aug;14(4):171-81.

[29] DeKruyff RH, Yu S, **Kim HY**, and Umetsu DT. Innate immunity in the lung regulates the development of asthma. *Immunol Rev*. 2014 Jul;260(1):235-48..

[28] **Kim HY**, Lee SB, Kang HS, Oh GT, Kim TS. Two distinct domains of Flo8 activator mediates its role in transcriptional activation and the physical interaction with Mss11. *Biochem Biophys Res Commun*. 2014 Jun 27;449(2):202-7.

[27] Yu S, **Kim HY**, Chang YJ, DeKruyff RH, Umetsu DT. Innate lymphoid cells and asthma *J Allergy Clin Immunol*. 2014 Apr;133(4):943-50

[26] Kasahara DI, **Kim HY**, Mathews JA, Verbout NG, Williams AS, Wurmbrand AP, Ninin FM, Neto FL, Benedito LA, Hug C, Umetsu DT, Shore SA. Pivotal role of IL-6 in the hyperinflammatory responses to subacute ozone in adiponectin deficient mice. *Am J Physiol Lung Cell Mol Physiol*. 2014 Mar 15;306(6):L508-20.

[25] **Kim HY**, Lee HJ, Chang YJ, Pichavant M, Shore SA, Fitzgerald KA, Iwakura Y, Israel E, Bolger K, Faul J, Dekruyff RH, and Umetsu DT. IL-17 producing innate lymphoid cells and the NLRP3 inflammasome facilitate obesity-associated airway hyperreactivity. *Nat Med*. 2014 Jan;20(1):54-61. *Faculty of 1000 prime, News and views in Nature medicine (20, 19-20)*

## 2013

[24] Albacker AL\*, Chaudhary V\*, Chang YJ\*, **Kim HY\***(\*Co-first authors), Pichavant M, Dekruyff RH, Savage P, and Umetsu DT. Invariant NKT cells recognized fungal glycopospholipid that can induce airway hyperreactivity. *Nat Med*. 2013 Oct;19(10):1297-1304 *News and views in Nature medicine (19, 2010-2011)*

[23] **Kim HY\***, Chang YJ\*(\*Co-first authors), Chuang YT, Lee HH, Hsu Joyce, Savage P, Shore SA, Freeman GJ, Dekruyff RH, Umetsu DT. T cell immunoglobuline and mucine domain 1 deficiency eliminate airway hyperreactivity triggered by the recognition of airway cell death. *J Allergy Clin Immunol*. 2013 Aug;132(2):414-425.e6

[22] Recher M, Fried AJ, Massaad M, **Kim HY**, Walter JE, Mathew D, Hess C, Giliani S, Umetsu DT, Notarangelo DJ and Geha RS. Intronic SH2D1A mutation with impaired SAP expression and agammaglobulinemia. *Clin Immunol*. 2013 Feb;146(2):84-9

## 2012

[21] Kim JH\*, Kim HS\*(\*Co-first authors), **Kim HY**, Oh SJ and Chung DH. Direct engagement of TLR4 in invariant NKT cells regulates immune diseases by differential cytokine production. *Plos one* 2012;7(9):e45348

[20] Kasahara DI, **Kim HY**, Williams AS, Verbout NG, Tran J, Si H, Hug C, Umetsu DT, and Shore SA. Pulmonary inflammation induced by subacute ozone is augmented in adiponectin deficient mice: role of IL-17 expressing macrophages. *J Immunol*. 2012 May 1;188(9):4558-67.

[19] Josefowicz SZ\*, Niec RE\* (\*Co-first authors), **Kim HY**, Treuting P, Chinen T, Zheng Y, Umetsu DT, Rudensky AY. Extrathymically generated regulatory T cells control mucosal T H 2 inflammation. *Nature*. 2012 Feb 8;482(7385):395-9.



# Hye Young Kim Ph.D. Curriculum Vitae

[18] **Kim HY\***, Chang YJ\* (\*Co-first authors), Subramanian V, Lee HH, Albacker AL, Matangkasombut P, Savage P, McKenzie HA, Smith ED., Rottman BJ, Dekruyff RH, Umetsu DT. Innate lymphoid cells responding to IL-33 mediate airway hyperreactivity independently of adaptive immunity *J Allergy Clin Immunol.* 2012 Jan;129(1):216-27.e1-6. \* *Editor's Choice in the same issue of JACI*

## 2011

[17] Chang YJ\*, **Kim HY\*** (\*Co-first authors), Albacker AL, Baumgarth N, McKenzie HA, Smith ED, Dekruyff RH, Umetsu DT. Innate lymphoid cells mediate influenza-induced airway hyper-reactivity independently of adaptive immunity. *Nat Immunol.* 2011 May 29;12(7):631-8. \**Faculty of 1000, Editor's choice in Science (10, June 2011), News and views in Nature Immunol(12, 587) and J Allergy Clin Immunol(2011)*

[16] **Kim HY**, Eyheramonho MB, Pichavant M, Cambaceres CG, Matangkasombut P, Cervio G, Kuperman S, Moreira R, Konduru K, Manangeeswaran M, Kaplan GG, DeKruyff RH, Umetsu DT and Rosenzweig SD. A polymorphism in TIM1 is associated with susceptibility to severe hepatitis A virus infection in humans. *J Clin Invest.* 2011 Mar;121(3):1111-8.\**Commentary in the same issue of J.Clin Invest., Highlighted in Nature/SciBX (17 March 2011), Research Highlight in Nature Reviews Gastroenterology & Hepatology (4 May 2011)*

[15] Chang YJ, **Kim HY**, Alberker AL, Lee HH, Baumgarth N, Akira S, Savage P, Illarionov P, Dekruyff RH, Umetsu DT. Influenza infection in suckling mice expands an NKT cell subset that protects against airway hyperreactivity. *J Clin Invest.* 2011 Jan;121(1):57-69. \**Highlighted "in this issue"*

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## PATENT

Chemokine expression regulator (PCT/KR2011/025953)

## NON-PEER REVIEWED SCIENTIFIC PUBLICATION

The roles of NKT cells in auto-immune disease

Korean society for molecular and cellular biology Vol. 17, No. 2, June 2005