

# Curriculum Vitae

**Name:** Eun-Jung Ann

## Education

Mar.2009 – : Ph.D. in Graduate School of Biological Sciences and Technology, Chonnam National University  
Mar.2007 – Feb. 2009: M.S. in Graduate School of Biological Sciences and Technology, Chonnam National University  
Mar. 2002 – Feb. 2007: B.S. in Biochemistry, Yeungnam University

## Dissertation Title

M.S. Thesis: Regulation of Notch1 signaling by Runx2 during osteoblast differentiation.

## Fellowships

## Honors and Awards

Feb, 2010: The best poster awards, The Korean Society for Molecular and Cellular Biology.

Feb, 2011: The best thesis awards, Chonnam National University  
(Regulation of Notch1 signaling by Runx2 during osteoblast differentiation)

## Research Experiences

## Bibliography

1. Mi-Yeon Kim\*, Jung-Soon Mo\*, Eun-Jung Ann\*, Su-Man Kim, Yun-Hee Choi, Ji-Hye Yoon, Hwa-Young Kim, Jeong-Sik Moon, Kwonseop Kim, Hyang-Sook Hoe and Hee-Sae Park, Regulation of Notch1 signaling by APP intracellular domain facilitates the protein degradation of the Notch1 intracellular domain and RBP-Jk. *J Cell Sci.* (in press)

2. Jung-Soon Mo, **Eun-Jung Ann**, Ji-Hye Yoon, Jane Jung, Yun-Hee Choi, Hwa-Young Kim, Ji-Sun Ann, Su-Man Kim, Mi-Yeon Kim, Ji-Ae Hong, Mi-Sun Seo, Florian Lang, Eui-Ju Choi, and Hee-Sae Park, Serum- and glucocorticoid-inducible Kinase1 (SGK1) controls Notch1 signaling by down-regulation of protein stability through Fbw7 ubiquitin ligase. *J Cell Sci.* 124:100-112 (2011)
3. **Eun-Jung Ann**, Hwa-Young Kim, Yun-Hee Choi, Mi-Yeon Kim, Jung-Soon Mo, Jane Jung, Ji-Hye Yoon, Su-Man Kim, Jeong-Sik Moon, Mi-Sun Seo, Ji-Ae Hong, Won-Gu Jang, Paul Shore, Toshihisa Komori, Jeong-Tae Koh, and Hee-Sae Park, Inhibition of Notch1 signaling by Runx2 during osteoblast differentiation. *Journal of Bone and Mineral Research.* 26(2):317-30(2011)
4. Mi-Yeon Kim\*, **Eun-Jung Ann**\*, Jung-Soon Mo\*, Federico Dajas-Bailador, Mi-Sun Seo, Ji-Ae Hong, Jane Jung, Yun-Hee Choi, Ji-Hye Yoon, Eui-Ju Choi, Hyang-Sook Hoe, Alan J. Whitmarsh and Hee-Sae Park, JIP1 binding to RBP-Jk mediates crosstalk between the Notch1 and JIP1-JNK signaling pathway *Cell Death and Differentiation* 17(11):1728-38 (2010)
5. Jung-Soon Mo, Jane Jung, Ji-Hye Yoon, Ji-Ae Hong, Mi-Yeon Kim, **Eun-Jung Ann**, Mi-Sun Seo, Yun-Hee Choi, Hee-Sae Park, DJ-1 modulates the p38 mitogen-activated protein kinase pathway through physical interaction with apoptosis signal-regulating kinase 1. *J Cell Biochem.* 2010 Mar 8.
6. S. Sakura Minami, You Me Sung, Sonya B. Dumanis, Seong Hwan Chi, Mark P. Burns, **Eun-Jung Ann**, Toshiharu Suzuki, R. Scott Turner, Hee-Sae Park, Daniel T. S. Pak, G. William Rebeck, Hyang-Sook Hoe, The cytoplasmic adaptor protein X11alpha and extracellular matrix protein Reelin regulate ApoE receptor 2 trafficking and cell movement. *FASEB J.* 24(1):58-69 (2010)

7. Mi-Yeon Kim\*, Ji-Hye Park\*, Jung-Soon Mo, **Eun-Jung Ann**, Seung-Ok Han, Sang-Hyun Baek, Kyoung-Jin Kim, Sun-Young Im, Jeon-Woo Park, Eui-Ju Choi and Hee-Sae Park, Downregulation by lipopolysaccharide of Notch signaling, via nitric oxide. *J Cell Sci.* 121(Pt 9): 1466-76 (2008)
8. Jung-Soon Mo, Mi-Yeon Kim, **Eun-Jung Ann**, Ji-Ae Hong and Hee-Sae Park, DJ-1 modulates UV-induced oxidative stress signaling through the suppression of MEKK1 and cell death. *Cell Death and Differentiation.* 15(6): 1030-41 (2008)
9. Mi-Jee Lee, Mi-Yeon Kim, Jung-Soon Mo, **Eun-Jung Ann**, Mi-sun Seo, Ji-Ae Hong, Yong-Chul Kim, and Hee-Sae Park, Indirubin-3'-monoxime, a derivative of a Chinese anti-leukemia medicine, inhibits Notch1 signaling. *Cancer Letters.* 265(2): 215-25 (2008)
10. Mi-Yeon Kim, **Eun-Jung Ann**, Jin-Young Kim, Jung-Soon Mo, Ji-Hye Park, Sun-Yee Kim, Mi-Sun Seo, and Hee-Sae Park, Tip60 Histone Acetyltransferase Acts as a Negative Regulator of Notch1 Signaling by Means of Acetylation. *Molecular and Cellular Biology.* 27(18): 6506-6519 (2007)
11. Jung-Soon Mo\*, Mi-Yeon Kim\*, Seung-Ok Han, In-Sook Kim, **Eun-Jung Ann**, Kyu Shik Lee, Mi-Sun Seo, Jin-Young Kim, Seung-Chul Lee, Jeon-Woo Park, Eui-Ju Choi, Jae Young Seong, Cheol O, Joe, Reinhard Fäessler, and Hee-Sae Park. Integrin-Linked Kinase controls Notch1 signaling by down-regulation of protein stability through Fbw7 ubiquitin ligase. *Molecular and Cellular Biology.* 27(15): 5565-5574 (2007)
12. Sang-Hyun Baek, Mi-Yeon Kim, Jung-Soon Mo, **Eun-Jung Ann**, Kyu Shik Lee, Ji-Hye Park, Jin-Young Kim, Mi-Sun Seo, Eui-Ju Choi and Hee-Sae Park.

Zinc induced downregulation of Notch signaling is associated with cytoplasmic retention of Notch1-IC and RBP-Jk via PI3k-Akt signaling pathway. *Cancer Letters*. 255(1): 117-126 (2007)

\*These authors contributed equally to this work

## **Invited Review**

## **Conferences**

1. DJ-1 Modulates the p38 Mitogen-Activated Protein Kinase Pathway through Physical Interaction with Apoptosis signal-Regulating Kinase 1. The Korean Society for Molecular and Cellular Biology, Feb 2010
2. Regulation of Notch1 Signaling by Runx2 during Osteoblast Differentiation. The Korean Society for Molecular and Cellular Biology, Feb 2010
3. JIP1 binding to RBP-Jk mediates crosstalk between Notch and JNK signaling. The Korean Society for Molecular and Cellular Biology, Feb 2010
4. Regulation of Notch1 Signaling by Runx2 during Osteoblast Differentiation. THE 49TH AMERICAN SOCIETY FOR CELL BIOLOGY ANNUAL MEETING, Dec 2009
5. DJ-1 Modulates the p38 Mitogen-Activated Protein Kinase Pathway through Physical Interaction with Apoptosis signal-Regulating Kinase 1. THE 49TH AMERICAN SOCIETY FOR CELL BIOLOGY ANNUAL MEETING, Dec 2009
6. JIP1 binding to RBP-Jk mediates crosstalk between Notch and JNK signaling.

The Korean Society for Molecular and Cellular Biology, Oct 2009

7. Regulation of Notch1 Signaling by Runx2 during Osteoblast Differentiation.  
The Korean Society for Molecular and Cellular Biology, Oct 2009
8. DJ-1 Modulates the p38 Mitogen-Activated Protein Kinase Pathway through Physical Interaction with Apoptosis signal-Regulating Kinase 1. The Korean Society for Molecular and Cellular Biology, Oct 2009
9. DJ-1 Modulates UV-induced Oxidative Stress Signaling through the Suppression of MEKK1 and Cell Death. THE 48TH AMERICAN SOCIETY FOR CELL BIOLOGY ANNUAL MEETING, Dec 2008
10. PI3K-AKT Signaling Pathway Downregulates Notch Signaling. THE 48TH AMERICAN SOCIETY FOR CELL BIOLOGY ANNUAL MEETING, Dec 2008
11. Downregulation by Lipopolysaccharide of Notch Signaling, via Nitric Oxide. THE 48TH AMERICAN SOCIETY FOR CELL BIOLOGY ANNUAL MEETING, Dec 2008
12. Indirubin-3'-monoxime, a derivative of a Chinese anti-leukemia medicine, inhibits Notch1 signaling. THE 48TH AMERICAN SOCIETY FOR CELL BIOLOGY ANNUAL MEETING, Dec 2008
13. SAG Protects Human Neuroblastoma SH-SY5Y Cells Against 1-methyl-4-phenylpyridinium ion (MPP<sup>+</sup>)-induced Cytotoxicity via the Downregulation of ROS Generation and JNK Signaling. THE 48TH AMERICAN SOCIETY FOR CELL BIOLOGY ANNUAL MEETING, Dec 2008
14. DJ-1 Modulates UV-induced Oxidative Stress Signaling through the Suppression of MEKK1 and Cell Death. International Congress on Cell

- Biology & The Korean Society for Molecular and Cellular Biology, Oct 2008
15. Downregulation of Notch signaling by Lipopolysaccharide through Nitric Oxide. International Congress on Cell Biology & The Korean Society for Molecular and Cellular Biology, Oct 2008
  16. Indirubin-3'-monoxime, a derivative of a Chinese anti-leukemia medicine, inhibits Notch1 signaling. International Congress on Cell Biology & The Korean Society for Molecular and Cellular Biology, Oct 2008
  17. Zinc-Induced Downregulation of Notch Signaling Is Associated with Cytoplasmic Retention of Notch1-IC and RBP-Jk via PI3K-Akt Signaling Pathway. International Congress on Cell Biology & The Korean Society for Molecular and Cellular Biology, Oct 2008
  18. Notch1 Intracellular Domain Suppresses APP Intracellular Domain-Tip60-Fe65 Complex-mediated Signaling through Physical Interaction. International Congress on Cell Biology & The Korean Society for Molecular and Cellular Biology, Oct 2008
  19. DJ-1 Modulates UV-induced Oxidative Stress Signaling through the Suppression of MEKK1 and Cell Death. The Korean Society for Biochemistry and Molecular Biology, May 2008
  20. Indirubin-3'-monoxime, a derivative of a Chinese anti-leukemia medicine, inhibits Notch1 signaling. The Korean Society for Biochemistry and Molecular Biology, May 2008
  21. Notch1 Intracellular Domain Suppresses APP Intracellular Domain-Tip60-Fe65 Complex-mediated Signaling through Physical Interaction. The Korean Society for Biochemistry and Molecular Biology, May 2008

22. Zinc Induced Downregulation of Notch Signaling Is Associated with Cytoplasmic Retention of Notch1-IC and RBP-Jk via PI3K-Akt Signaling Pathway. The Korean Society for Biochemistry and Molecular Biology, May 2008
23. Downregulation of Notch signaling by Lipopolysaccharide through Nitric Oxide. The Korean Society for Biochemistry and Molecular Biology, May 2008
24. Notch1 Intracellular Domain Suppresses APP Intracellular Domain-Tip60-Fe65 Complex-mediated Signaling through Physical Interaction. The Korean Society for Molecular and Cellular Biology, Feb 2008
25. Integrin-linked Kinase Controls Notch1 Signaling by Down-regulation of protein Stability through Fbw7 Ubiquitin Ligase. The Korean Society for Molecular and Cellular Biology, Feb 2008
26. Tip60 Histone Acetyltransferase Acts as a Negative Regulator of Notch1 Signaling by Means of Acetylation. The Korean Society for Molecular and Cellular Biology, Feb 2008
27. Zinc Induced Downregulation of Notch Signaling Is Associated with Cytoplasmic Retention of Notch1-IC and RBP-Jk via PI3K-Akt Signaling Pathway. The Korean Society for Molecular and Cellular Biology, Feb 2008
28. Zinc Induced Downregulation of Notch Signaling Is Associated with Cytoplasmic Retention of Notch1-IC and RBP-Jk via PI3K-Akt Signaling Pathway. THE 47TH AMERICAN SOCIETY FOR CELL BIOLOGY ANNUAL MEETING, Dec 2007
29. Integrin-linked Kinase Controls Notch1 Signaling by Down-regulation of protein Stability through Fbw7 Ubiquitin Ligase. THE 47TH AMERICAN

SOCIETY FOR CELL BIOLOGY ANNUAL MEETING, Dec 2007

30. Tip60 Histone Acetyltransferase Acts as a Negative Regulator of Notch1 Signaling by Means of Acetylation. THE 47TH AMERICAN SOCIETY FOR CELL BIOLOGY ANNUAL MEETING, Dec 2007
31. Notch1 Intracellular Domain Suppresses APP Intracellular Domain-Tip60-Fe65 Complex-mediated Signaling through Physical Interaction. THE 47TH AMERICAN SOCIETY FOR CELL BIOLOGY ANNUAL MEETING, Dec 2007
32. Integrin-linked Kinase Controls Notch1 Signaling by Down-regulation of protein Stability through Fbw7 Ubiquitin Ligase. The Korean Society for Molecular and Cellular Biology, Oct 2007
33. Tip60 Histone Acetyltransferase Acts as a Negative Regulator of Notch1 Signaling by Means of Acetylation. The Korean Society for Molecular and Cellular Biology, Oct 2007
34. Notch1 Intracellular Domain Suppresses APP Intracellular Domain-Tip60-Fe65 Complex-mediated Signaling through Physical Interaction. The Korean Society for Molecular and Cellular Biology, Oct 2007
35. Zinc Induced Downregulation of Notch Signaling Is Associated with Cytoplasmic Retention of Notch1-IC and RBP-Jk via PI3K-Akt Signaling Pathway. The Korean Society for Molecular and Cellular Biology, Oct 2007

## **Research grants**

## **Skills**



## 1. Cell biological Methods and In vivo animal model

Mammalian cell culture, Primary cell isolation & culture from tissue

Human, Rat and Mouse Vascular Smooth Muscle cells primary culture

Mouse Bone marrow macrophagy primary culture

Islet isolation from pancreas (Rat and mouse) and IH

## 2. Histological Analysis

Immunohistochemistry, Immunocytochemistry

TRAP staining

## 3. Western Blot analysis

## 4. Gene cloning/ Subcloning

## 5. Interaction assay

Chromatin Immunoprecipitaion Assay (ChIP Assay)

GST-pull down, Immunoprecipitation (IP) and Co-IP

## 6. Reporter gene assay (Transient transfection Assay)