

# Eunhee Yi, Ph.D.

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Jackson Laboratory for Genomic Medicine  
10 Discovery Dr, Farmington, CT, United State

## EDUCATION

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Seoul National University, Korea February 2015  
Ph.D, Biomedical Science  
Thesis: Study on the critical role of BST-2 as a cancer stem cell marker in glioblastoma

Konkuk University, Korea August 2008  
B.S. Biotechnology

## RESEARCH POSITIONS

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Postdoctoral Associate, JAX-GM July 2017 – Present

Research Assistant Professor, Seoul National University, Korea June 2015 – June 2017

Research Assistant, Seoul National University, Korea April 2012 – March 2015

Graduate Student, Seoul National University March 2009 – February 2015

## QUALIFICATIONS

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Teaching License, Secondary School Teacher in Biology (MEST) August 2008

## RESEARCH EXPERIENCE

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### Molecular Biological In vitro assay

- Cell line and Primary cell culture
- Sub Cellular Fraction (Exosome/Lipid raft/cell membrane/cytosol/nucleus)
- DNA cloning / Gene overexpression / Gene knockdown
- Western blot analysis / RT-PCR / Real-time PCR / ELISA / Cytokine array
- Chromatin Immunoprecipitation / Luciferase-reporter assay
- Protein-protein immunoprecipitation
- Immunological cell staining / Histological analysis (IHC and IF)

### Functional assay

- Matrigel-invasion assay / Wound healing migration assay / MTT-cell death assay
- Limiting Dilution assay
- Apoptosis / Cell cycle

### In vivo mouse model and analysis

- DNCB-induced Atopic dermatitis model
- Poly I:C-induced Pneumonia model
- Xenograft model (Subcutaneous and intravenous xenograft)

- Tumor Serial transplantation model

#### Equipment operation

- BD FACSCalibur, BD LSRII, BD LSRFortessa
- Confocal microscopy
- MACS cell sorting (magnetic bead cell separation)

## PUBLICATIONS

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Kwon SH, Han JK, Choi M, Kwon YJ, Kim SJ, **Yi EH**, Shin JC, Cho IH, Kim BH, Jeong Kim S, Ye SK. (2017) Dysfunction of Microglial STAT3 Alleviates Depressive Behavior via Neuron-Microglia Interactions. *Neuropsychopharmacology*.

Shin M\*, **Yi EH\***, Kim BH, Shin JC, Park JY, Cho JH, Park JW, Choi KY, Ye SK. (2016) STAT3 potentiates SIAH-1 mediated proteasomal degradation of  $\beta$ -catenin in human embryonic kidney cells. *Mol Cells*.

Han S, Jeong AJ, Yang H, Bin Kang K, Lee H, **Yi EH**, Kim BH, Cho CH, Chung JW, Sung SH, Ye SK. (2016) Ginsenoside 20(S)-Rh2 exerts anti-cancer activity through targeting IL-6-induced JAK2/STAT3 pathway in human colorectal cancer cells. *J Ethnopharmacol*.

Kim BH, **Yi EH**, Ye SK. (2016) Signal transducer and activator of transcription 3 as a therapeutic target for cancer and the tumor microenvironment. *Arch Pharm Res*.

Kim BH, Yoon BR, Kim EK, Noh KH, Kwon SH, **Yi EH**, Lee HG, Choi JS, Kang SW, Park IC, Lee WW, Ye SK. (2016) Alleviation of collagen-induced arthritis by the benzoxathiole derivative BOT-4-one in mice: Implication of the Th1- and Th17-cell-mediated immune responses. *Biochem Pharmacol*.

Kim BH, Choi MS, Lee HG, Lee SH, Noh KH, Kwon S, Jeong AJ, Lee H, **Yi EH**, Park JY, Lee J, Joo EY, Ye SK. (2015) Photoprotective Potential of Penta-O-Galloyl- $\beta$ -DGlucose by Targeting NF- $\kappa$ B and MAPK Signaling in UVB Radiation-Induced Human Dermal Fibroblasts and Mouse Skin. *Mol Cells*.

Won C, Kim BH, **Yi EH**, Choi KJ, Kim EK, Jeong JM, Lee JH, Jang JJ, Yoon JH, Jeong WI, Park IC, Kim TW, Bae SS, Factor VM, Ma S, Thorgeirsson SS, Lee YH, Ye SK. (2015) Signal transducer and activator of transcription 3-mediated CD133 up-regulation contributes to promotion of hepatocellular carcinoma. *Hepatology*.

Lee JK, Won C, **Yi EH**, Seok SH, Kim MH, Kim SJ, Chung MH, Lee HG, Ikuta K, Ye SK. (2013) Signal transducer and activator of transcription 3 (Stat3) contributes to T-cell homeostasis by regulating pro-survival Bcl-2 family genes. *Immunology*.

**Yi EH**, Yoo H, Noh KH, Han S, Lee H, Lee JK, Won C, Kim BH, Kim MH, Cho CH, Ye SK. (2013) BST-2 is a potential activator of invasion and migration in tamoxifen-resistant breast cancer cells. *Biochem Biophys Res Commun*.

Kim BH, Choi JS, **Yi EH**, Lee JK, Won C, Ye SK, Kim MH. (2013) Relative antioxidant activities of quercetin and its structurally related substances and their effects on NF- $\kappa$ B/CRE/AP-1 signaling in murine macrophages. *Mol Cells*.

**Yi EH**, Lee CS, Lee JK, Lee YJ, Shin MK, Cho CH, Kang KW, Lee JW, Han W, Noh DY, Kim YN, Cho IH, Ye SK. (2013) STAT3-RANTES autocrine signaling is essential for tamoxifen resistance in human breast cancer cells. *Mol Cancer Res*.

Lee CS, **Yi EH**, Lee JK, Won C, Lee YJ, Shin MK, Yang YM, Chung MH, Lee JW, Sung SH, Ye SK. (2013) Simvastatin suppresses RANTES-mediated neutrophilia in polyinosinic-polycytidylic acid-induced pneumonia. *Eur Respir J*.

Min YS\*, **Yi EH\***, Lee JK, Choi JW, Sim JH, Kang JS, Kim YN, Juhnn YS, Kim HR, Ye SK. (2012) CK20 expression enhances the invasiveness of tamoxifen-resistant MCF-7 cells. *Anticancer Res*.

Lee CS, **Yi EH**, Kim HR, Huh SR, Sung SH, Chung MH, Ye SK. (2011) Anti-dermatitis effects of oak

wood vinegar on the DNCB-induced contact hypersensitivity via STAT3 suppression. *J Ethnopharmacol*.

Lee CS, Won C, Yoo H, **Yi EH**, Cho Y, Maeng JW, Sung SH, Ye SK, Chung MH. (2009) Inhibition of double-stranded RNA-induced inducible nitric oxide synthase expression by fraxinellone and sauchinone in murine microglia. *Biol Pharm Bull*.