Curriculum Vitae

Seung-Oe Lim, Ph.D.

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Personal Information

Working address: Assistant Professor
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Education

09/2003 - 08/2008	**Ph.D.** School of Biological Sciences, Seoul National University, Republic of Korea "Epigenetic Changes induced by reactive oxygen species in Hepatocellular Carcinoma: Methylation of the E-cadherin Promoter" Advisor: Guhung Jung, Ph.D.
03/2001 - 02/2003	**M.S.** School of Biological Sciences, Seoul National University, Republic of Korea
03/1997 - 02/2001	**B.S.** Department of Biology Education, Seoul National University, Republic of Korea (*Cum laude*)

Professional Experiences

07/2017 - present	**Assistant Professor**, Department of Medicinal Chemistry and Molecular Pharmacology, Purdue University, West Lafayette, IN, USA
02/2016 – 06/2017	**Instructor**, Department of Molecular and Cellular Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA
03/2010 - 01/2016	**Postdoctoral Fellow**, Department of Molecular and Cellular Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA Advisor: Mien-Chie Hung, Ph.D.
09/2008 - 01/2010	**Postdoctoral Fellow**, School of Biological Sciences, Seoul National University, Seoul, Republic of Korea Advisor: Guhung Jung, Ph.D.

Honors and Awards

12/2012 - 12/2015	**Susan G. Komen for the Cure® Postdoctoral Fellowship Grant** (PDF12231298) funded by Susan G. Komen the Cure®

05/2015	**Best Oral Presentation Award,** Center for Biological Pathways and Center for Inflammation and Cancer Joint Retreat
09/2011	**National Research Foundation of Korea Grant** (NRF-2011-C00140) funded by the Korean Government (Ministry of Education, Science and Technology)
03/2009 - 01/2010	**Brain Korea 21 (BK21) Postdoctoral Fellowship** funded by the Korean Government (Ministry of Education, Science and Technology)
09/2007 - 08/2008	**National Research Fellowship for Science and Engineering** (S2-2007-000-00535-1) funded by the Korean Government (Ministry of Science and Technology)
03/2007	**Brain Korea 21 (BK21) Fellowship** funded by the Korean Government (Ministry of Education and Human Resources Development)
01/2007	**Scholar-in-training Awards**, 7th Joint Conference of the AACR & JCA in the Forefront of Basic and Translational Cancer Research
11/2005 - 10/2006	**Korea Research Foundation (KRF) Fellowship** funded by the Korean Government (Ministry of Education and Human Resources Development)
03/2005	**Lecture & Research Scholarship**, Seoul National University
09/2004	**Superior Academic Performance Scholarship**, Seoul National University
03/2004	**National Scholarship for Science and Engineering** funded by the Korean Government (Ministry of Science and Technology)
09/2003	**Young Investigator Award**, 8th European Meeting on Liver Carcinogenesis
09/2002	**Superior Academic Performance Scholarship**, Seoul National University
03/2002	**Lecture & Research Scholarship**, Seoul National University
03/2002	**Superior Academic Performance Scholarship**, Seoul National University
09/2001	**Superior Academic Performance Scholarship**, Seoul National University
02/2001	**The Alumni Award** of College of Education Seoul National University
09/2000	**Eminence scholarship**, Seoul National University
03/2000	**Eminence scholarship**, Seoul National University
09/1999	**Superior Academic Performance Scholarship**, Seoul National University
03/1999	**Sado scholarship**, Seoul National University
09/1998	**Sado scholarship**, Seoul National University
03/1998	**Sado scholarship**, Seoul National University
09/1997	**Sado scholarship**, Seoul National University

Peer-Reviewed Publications

1. **Lim SO**, Park SJ, Kim W, Park SG, Kim HJ, Kim YI, Sohn TS, Noh JH, Jung G. "Proteome analysis of hepatocellular carcinoma" ***Biochem Biophys Res Commun*** 2002 Mar 8; 291(4):1031-7.

2. Park SG, **Lm SO**, Jung G. "Binding Site Analysis of Human HBV Pol for Molecular Chaperonin, Hsp60" ***Virology*** 2002 Jun; 283, 116-23.

3. Kim W* and **Lim SO***, Kim JS, Ryu YH, Byeon JY, Kim HJ, Kim YI, Heo JS, Park YM, Jung G. "Comparison of Proteome between Hepatitis B Virus- and Hepatitis C Virus- associated Hepatocellular Carcinoma" ***Clinical Cancer Research*** 2003 Nov 15;9(15):5493-500. ****Co-first author***

4. Yoo JH, **Lim SO**. "DFO treatment of HepG2.2.15 induces proteomic changes that may inhibit viral particle secretion" ***Korean Journal of Genetics*** 2004 Dec. 26(4)**:** 397-403.

5. **Lim SO**, Park SG, Yoo JH, Park YM, Kim HJ, Jang KT, Cho JW, Yoo BC, Park CK, Jung G. "Expression of Heat Shock Proteins in Hepatitis B Virus-Related Hepatocellular Carcinomas and Dysplastic Nodules" ***World Journal of Gastroenterology*** 2005 Apr 14;11(14):2072-9.

6. Lee SH, Park SG, **Lim SO**, Jung G. "The hepatitis B virus X protein up-regulates lymphotoxin a expression in hepatocytes" ***BBA*** 2005 Jun; 1741:75-84.

7. Park SG, Ryu HM, **Lim SO**, Kim YI, Hwang SB, Jung G. " Interferon-γ Inhibits Hepatitis B Virus-Induced NF-κB Activation through Nuclear Localization of NF-κB-inducing Kinase " ***Gastroenterology*** 2005 Jun;128(7):2042-53.

8. Lee HH, Kim HS, Kang JY, Lee BI, Ha JY, Yoon HJ, **Lim SO**, Jung G, Suh SW "Crystal structure of human nucleophosmin-core reveals plasticity of the pentamer-pentamer interface." ***Proteins*** 2007 Aug 24;69(3):672-678.

9. Gu JM, **Lim SO**, Oh SJ, Yoon SM, Seong J, Jung G. "HBx modulates iron regulatory protein 1-mediated iron metabolism via reactive oxygen species" ***Virus Research*** 2008 Feb 8; 133,167-177.

10. Gu JM, **Lim SO**, Park YM, Jung G. "A novel splice variant of occludin deleted in exon 9 and its role in cell apoptosis and invasion" ***FEBS J*** 2008 Jun;275(12):3145-56. Epub 2008 May 16.

11. **Lim SO**, Gu JM, Kim MS, Kim HS, Park YN, Park CK, Cho JW, Park YM, Jung G. "Epigenetic Changes induced by reactive oxygen species in Hepatocellular Carcinoma: Methylation of the E-cadherin Promoter" ***Gastroenterology*** 2008 Dec; 135(6):2128-2140. Epub 2008 Jul 31.

12. Lim SO, Kim HT, Jung G. "p53 Inhibits Tumor Cell Invasion via the Degradation of Snail Protein in Hepatocellular carcinoma" ***FEBS Lett.*** 2010 Jun 3;584(11):2427-32. Epub 2010 Apr 21.

13. Min JY, **Lim SO**, Jung G. "Downregulation of catalase by reactive oxygen species via hypermethylation of CpG island II on the catalase promoter." ***FEBS Lett.*** 2010 Jun 3;584(11):2427-32. Epub 2010 Apr 21.

14. Hsieh A, Kim HS, **Lim SO**, Yu DY, Jung G. "Hepatitis B viral X protein interacts with tumor suppressor adenomatous polyposis coli to activate Wnt/β-catenin signaling" ***Cancer Lett.*** 2011 Jan 28;300(2):162-72. Epub 2010 Oct 23.

15. Song H, Li CW, Labaff AM, **Lim SO**, Li LY, Kan SF, Chen Y, Zhang K, Lang J, Xie X, Wang Y, Huo LF, Hsu SC, Chen X, Zhao Y, Hung MC. "Acetylation of EGF receptor contributes to tumor cell resistance to histone deacetylase inhibitors" ***Biochem Biophys Res Commun.*** 2011 Jan 7;404(1):68-73. Epub 2010 Nov 19.

16. Lim SO, Park YM, Kim HS, Quan X, Yoo JE, Park YN, Choi GH, Jung G. "Notch1 differentially regulates oncogenesis by wild type p53 overexpression and p53 mutation in grade III hepatocellular carcinoma" ***Hepatology*** 2011 Apr;53(4):1382-1392.

17. Quan X, **Lim SO**, Jung G. "Reactive oxygen species downregulate catalase expression via methylation of a CpG Island in the Oct-1 promoter" ***FEBS Lett.*** 2011 Nov 4;585(21):3436-41. Epub 2011 Oct 6.

18. Lim SO, Kim HS, Quan X, Ahn SM, Kim H, Hsieh D, Seong JK, Jung G. "Notch1 binds and induces degradation of Snail in hepatocellular carcinoma" ***BMC Biology*** 2011 Nov 30; 9(1):83.

19. Li CW, Xia W, Huo L, **Lim SO**, Wu Y, Hsu JL, Chao CH, Yamaguchi H, Yang NK, Ding Q, Wang Y, Lai YJ, Labaff AM, Wu TJ, Lin BR, Yang MH, Hortobagyi GN, Hung MC. **"**Epithelial-Mesenchymal Transition Induced by TNF-α Requires NF-κB-Mediated Transcriptional Upregulation of Twist1**"** ***Cancer Res.*** 2012 Mar 1;72(5):1290-1300. Epub 2012 Jan 17

20. Kim HS, Jeong H, **Lim SO**, Jung G. **"**Snail inhibits Notch1 intracellular domain mediated transcriptional activation via competing with MAML1" ***Biochem Biophys Res Commun*** 2013 Mar 29; 433(1): 6-10.

21. Shen J, Xia W, Khotskaya Y, Huo LF, Nakanishi K, **Lim SO**, Du Y, Wang Y, Chang WC, Chen CH, Hsu J, Lam YC, James B, Liu X, Liu CG, Patel D, Wu Y, Hung MC, "EGFR Modulates miRNA Maturation in Response to Hypoxia through Phosphorylation of Ago2" ***Nature*** 2013 May 01; 497: 383-387.

22. Hsu MC, Hung WC, Yamaguchi H, **Lim SO**, Liao HW, Tsai CH, Hung MC. "Extracellular PKM2 induces cancer proliferation by activating the EGFR signaling pathway" ***Am J Cancer Res.*** 2016 Feb 15;6(3):628-38.

23. **Lim SO**, Li CW, Xia W, Lee HH, Chang SS, Shen J, Hsu JL, Raftery D, Djukovic D, Gu H, Chang WC, Wang HL, Chen ML, Huo L, Chen CH, Wu Y, Sahin A, Hanash SM, Hortobagyi GN, Hung MC. "EGFR Signaling Enhances Aerobic Glycolysis in Triple-Negative Breast Cancer Cells to Promote Tumor Growth and Immune Escape" ***Cancer Res.*** 2016 Mar 1;76(5):1284-96.

24. Li CW, Xia W, **Lim SO**, Hsu JL, Huo L, Wu Y, Li LY, Lai CC, Chang SS, Hsu YH, Sun HL, Kim J, Yamaguchi H, Lee DF, Wang H, Wang Y, Chou CK, Hsu JM, Lai YJ, LaBaff AM, Ding Q, Ko HW, Tsai FJ, Tsai CH, Hortobagyi GN, Hung MC. "AKT1 Inhibits Epithelial-to-Mesenchymal Transition in Breast Cancer through Phosphorylation-Dependent Twist1 Degradation" ***Cancer Res.*** 2016 Mar 15;76(6):1451-62.

25. Ko HW, Lee HH, Huo L, Xia W, Yang CC, Hsu JL, Li LY, Lai CC, Chan LC, Cheng CC, Labaff AM, Liao HW, **Lim SO**, Li CW, Wei Y, Nie L, Yamaguchi H, Hung MC. "GSK3β inactivation promotes the oncogenic functions of EZH2 and enhances methylation of H3K27 in human breast cancers" ***Oncotarget*** 2016 Aug 2; DOI: 10.18632/oncotarget.11008.

26. Li CW*, **Lim SO***, Xia W, Lee HH, Chan LC, Kuo CW, Khoo KH, Chang SS, Cha JH, Kim T, Hsu JL, Wu Y, Hsu JM, Yamaguchi H, Ding Q, Wang Y, Yao J, Lee CC, Wu HJ, Sahin AA, Allison JP, Yu D, Hortobagyi GN, Hung MC. "Glycosylation and stabilization of programmed death ligand-1 suppresses T cell activity" †***Nature Commun.*** 2016 Aug 30; 7:12632 ***Co-first author**

†Selected as 2016: Signaling breakthroughs of the year by *Sci Signaling*

27. Chang SS, Yamaguchi H, Xia W, **Lim SO**, Khotskaya Y, Wu Y, Chang WC, Liu Q, Hung MC. "Aurora A Kinase Activates YAP Signaling in Triple-Negative Breast Cancer" ***Oncogene*** 2016 Sep 5; doi: 10.1038/onc/2016.292.

28. **Lim SO***, Li CW*, Xia W, Cha JH, Chan LC, Wu Y, Chang SS, Lin WC, Hsu JM, Hsu YH, Kim T, Chang WC, Hsu JL, Yamaguchi H, Ding Q, Wang Y, Yang Y, Chen CH, Sahin AA, Yu D, Hortobagyi GN, Hung MC. "Deubiquitination and stabilization of PD-L1 by CSN5" †***Cancer Cell*** 2016 Dec 12; 30:1-15. Epub 2016 Nov 17 ***Co-first author**

†Research Watch "Chronic inflammation promotes CSN5-mediated PD-L1 stabilization". ***Cancer Discovery*** (DOI:10.1158/2159-8290. CD-RW2016-224) Dec 2, 2016.

†Selected as 2016: Signaling breakthroughs of the year by *Sci Signaling*

†Preview Y. Grinberg-Bleyer, S. Ghosh, "A novel link between inflammation and cancer" ***Cancer Cell*** 2016 Dec 12; 30: 829–830. DOI: 10.1016/j.ccell.2016.11.013

†Editor's choice "Inflammation helps tumors evade immune detection" ***Sci. Signaling*** 20 Dec 2016: Vol. 9, Issue 459, pp. ec300; DOI: 10.1126/scisignal.aam6078

29. Jiao S, Xia W, Yamaguchi H, Wei Y, Chen MK, Hsu JM, Hsu JL, Yu WH, Du Y, Lee HH, Li CW, Chou CK, **Lim SO**, Chang SS, Litton JK, Arun B, Hortobagyi GN, Hung MC. "PARP inhibitor upregulates PD-l1 expression and enhances cancer-associated immunosupression" ***Clin Cancer Res*** 2017 Feb 6. pii: clincanres.3215.2016. doi: 10.1158/1078-0432.CCR-16-3215. [Epub ahead of print]

Submitted or in Preparation

30. **Lim SO***, Li CW*, Chung EM, Kim YS, Andrew H. Park AH, Cha JH, Xia W, Chan LC, Kim T, Chang SS, Lee HH, Chou CK, Liu YL, Horng H, Yeh T, Perillo EP, Dunn AK, Kuo CW, Khoo KH, Hsu JL, Wu Y, Hsu JM, Yamaguchi H, Yao J, Sahin AA, Hortobagyi GN, Yoo SS, Hung MC. "Eradication of triple-negative breast cancer cells by targeting glycosylated PD-L1" (*in revision*) ***Co-first author**

Patents

1. US Provisional Patent Application No. **62/316,178**

Title: COMBINATION TREATMENTS OF PROGRAMMED DEATH LIGAND-1 (PD-LI) POSITIVE CANCERS
Inventors: Stephen S. Yoo, Ezra M. Chung, Yong-Soo Kim, Kyu Lee Han, Mien-Chie Hung, Chia-Wei Li, **Seung-Oe Lim**
File date: 03/31/2016

2. US Provisional Patent Application No. **62/314,652**, DUAL FUNCTION ANTIBODIES
Title: SPECIFIC TO GLYCOSYLATED PD-L1 AND METHODS OF USE THEREOF
Inventors: Stephen S. Yoo, Ezra M. Chung, Yong-Soo Kim, Kyu Lee Han, Andrew Park, Mien-Chie Hung, Chia-Wei Li, **Seung-Oe Lim**
File date: 03/29/2016

3. US Provisional Patent Application No. **62/140,135**
Title: ANTIBODIES SPECIFIC TO GLYCOSYLATED PD-L1 AND METHODS OF USE THEREOF
Inventors: Mien-Chie Hung, Chia-Wei Li, **Seung-Oe Lim**
File date: 03/30/2015

4. US Provisional Patent Application No. **62/262,303**
Title: ANTIBODIES SPECIFIC TO GLYCOSYLATED PD-1 AND METHODS OF USE THEREOF
Inventors: Mien-Chie Hung, Chia-Wei Li, **Seung-Oe Lim**, Stephen S. Yoo, Ezra M. Chung, Yong-Soo Kim
File date: 12/02/2015

5. PCT application serial number: **PCT/US16/24691**
Title: ANTIBODIES SPECIFIC TO GLYCOSYLATED PD-L1 AND METHODS OF USE THEREOF
Inventors: Stephen S. YOO, Ezra M. CHUNG, Yong-Soo KIM, Mien-Chie Hung, Chia-Wei Li, **Seung-Oe Lim**
File date: 03/29/2016

6. US Provisional Patent Application No. **62/361,312**
Title: DUAL FUNCTION ANTIBODIES SPECIFIC TO GLYCOSYLATED PD-L1 AND METHODS OF USE THEREOF
Inventors: Mien-Chie Hung, Chia-Wei Li, **Seung-Oe Lim**, Stephen S. Yoo, Ezra M. Chung, Yong-Soo Kim, Kyu Lee Han, Andrew Park
File date: 07/12/2016

7. US Provisional Patent Application No. **62/394,974**
Title: METHODS OF CANCER TREATEMENT AND THERAPY USING A COMBINATION OF ANTI-GLYCOSYLATED PD-L1 AND EGF OR TNFALPHA INHIBITORS
Inventors: Mien-Chie Hung, Stephen S. Yoo, Chia-Wei Li, **Seung-Oe Lim**
File date: 09/15/2016

8. US Provisional Patent Application No. **62/364,441**
Title: METHODS OF CANCER TREATMENT AND THERAPY USING A COMBINATION OF ANTIBODIES THAT BIND GLYCOSYLATED PD-L1
Inventors: Stephen S. Yoo, Mien-Chie Hung, Chia-Wei Li, **Seung-Oe Lim**
File date: 07/20/2016

Presentations

Oral Presentations

1. Reactive Oxygen Species Enhance Tumor Cell Invasion in Hepatocellular Carcinomas, *Symposium: Cellular Toxicology and Therapeutics*, Oct 11, 2005, 4th World Congress of Cellular and Molecular Biology, Poitiers, France.

2. N-linked glycosylation of PD-L1 in cancer cells is required for its interaction with PD-1 to evade immune response, *Center for Biological Pathways and Center for Inflammation and Cancer Joint Retreat*, May 01, 2015, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.
3. Glycosylation and stabilization of PD-L-1 suppresses T cell activity, *Seminar in the Department of Molecular and Cellular Oncology*, Oct 19, 2015, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.
4. Regulation mechanism of PD-L1 in cancer immune evasion, *Seminar in the Center for Cell and Gene Therapy*, Feb 20, 2017, Baylor College of Medicine, Houston, TX, USA.
5. Regulation mechanism of PD-L1 in cancer immune evasion, *Seminar in the Department of Medicinal Chemistry and Molecular Pharmacology*, Feb 23, 2017, Purdue University College of Pharmacy, West Lafayette, IN, USA.
6. Regulation mechanism of PD-L1 in cancer immune evasion, *Seminar in the China Medical University*, Mar 8, 2017, China Medical University and Hospital, Taichung, Taiwan.
7. Regulation mechanism of PD-L1 in cancer immune evasion, *Seminar in the Department of Radiation Oncology*, Apr 10, 2017, University of Alabama at Birmingham, School of Medicine, Birmingham, AL, USA.
8. Deubiquitination and stabilization of PD-L1 by CSN5, *GAP 2017 Conference*, May 9, 2017, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.
9. Immune checkpoint inhibitors in immuno-oncology: Discovery, Development, Delivery, *Seminar in Bayer Korea,* May 25, 2017, Bayer Korea Ltd., Seoul, Republic of Korea.
10. Regulation mechanism of PD-L1 in cancer immune evasion, *Seminar in Cha Hospital*, May 25, 2017, Cha Hospital, Seongnamsi, Gyeonggido, Republic of Korea.
11. Immune checkpoint inhibitors in immuno-oncology: Discovery, Development, Delivery, *Seminar in SK biopharmaceuticals,* May 26, 2017, SK biopharmaceuticals, Seongnamsi, Gyeonggido, Republic of Korea.
12. Regulation mechanism of PD-L1 in cancer immune evasion, *Seminar in Asan Medical Center*, May 29, 2017, Asan Medical Center, Asan Digestive Disease Research Institute, Seoul, Republic of Korea.
13. Regulation mechanism of PD-L1 in cancer immune evasion, *Seminar in Cell Logistics Research Center and School of Life Science,* May 30, 2017, Gwangju Institute of Science and Technology, Gwangju, Republic of Korea.
14. Regulation mechanism of PD-L1 in cancer immune evasion, *Seminar in Chosun University School of Medicine*, May 31, 2017, Chosun University School of Medicine, Gwangju, Republic of Korea.
15. Regulation mechanism of PD-L1 in cancer immune evasion, *Seminar in the Department of Molecular Medicine*, Jun 1, 2017, Ewha Womans University, School of Medicine, Seoul, Republic of Korea.
16. Regulation mechanism of PD-L1 in cancer immune evasion, *Seminar in the College of Pharmacy*, Jun 2, 2017, Seoul National University, College of Pharmacy, Seoul, Republic of Korea.

Poster Presentations

1. **Lim SO**, Kim W, Kim JS, Ryu YH, Byeon JY, Kim HJ, Kim YI, Heo JS, Park YM, Jung G. Comparison of Proteome between Hepatitis B Virus- and Hepatitis C Virus-Associated Hepatocellular Carcinoma. *8th European Meeting on Liver Carcinogenesis*, Sep 5-8, 2003 Mainz, Germany.
2. **Lim SO**, Park SG, Jung G. Expression of Heat Shock Proteins (HSP27, HSP60, HSP70, HSP90, GRP78, GRP94) in Hepatitis B Virus-Related Hepatocellular Carcinomas and in Dysplastic Nodules, *International meeting of the Molecular Biology of Hepatitis B Viruses*, Oct 24 -27, 2004 Woods Hole, MA, USA.
3. **Lim SO**, Kim MS, Gu JM, Kim HS, Park CK, Jung G. Differential Expression of Antioxidant Enzymes in Hepatocellular Carcinomas: Reactive Oxygen Species enhance tumor cell invasion, *4th World Congress of Cellular and Molecular Biology*, Oct 7-12 2005, Poitiers, France.
4. **Lim SO**, Kim MS, Gu JM, Kim HS, Park CK, Jung G. Reactive Oxygen Species Enhance Tumor Cell Invasion via Snail in Hepatocellular Carcinoma, *7th Joint Conference of the AACR & JCA in the Forefront of Basic and Translational Cancer Research*, Jan 21-25, 2007 Waikoloa, HI, USA.
5. **Lim SO**, Li CW, Chang SS, Shen J, Hung MC. A novel function of EGFR in epigenetic modulation via hMOF in breast cancer, *AACR Annual Meeting 2013*, Apr 6-10, 2013, Washington, DC, USA.
6. **Lim SO**, Li CW, Xia W, Lee HH, Chang SS, Hung MC. Epidermal growth factor signaling-induced glycolytic jam enhances immune suppression in triple-negative breast cancer cells, *Antibody Engineering & Therapeutics 2015*, Dec 5-10, 2015, San Diego, CA, USA.

7. **Lim SO**, Li CW, Hung MC. Stabilization of programmed death ligand-1 by epidermal growth factor enhances cancer cell immune escape, *Tumor Immunology and Immunotherapy*, Oct 20-25, 2016, Boston, MA, USA
8. **Lim SO**, Li CW, Hung MC. Deubiquitination and stabilization of PD-L1 by CSN5, *AACR Annual Meeting 2017*, Apr 1-5, 2013, Washington, DC, USA.

Grant Proposals

Completed

09/2011 – 08/2012 **National Research Foundation of Korea Grant** (PI, NRF-2011-C00140) funded by the Korean Government (Ministry of Education, Science and Technology)

12/2012 – 12/2015 **Susan G. Komen for the Cure® Postdoctoral Fellowship Grant** (PI, PDF12231298) funded by Susan G. Komen the Cure®
Title: A novel mechanism of EGFR in epigenetic modulation via hMOF in breast cancer

Active

08/2017 – 07/2020 **Susan G. Komen Career Catalyst Research (CCR) Grant** (PI)
Title: A novel immunotherapy for TNBC by targeting glycosylation of PD-L1