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CURRICULUM VITAE

So, Eui Young, Ph.D.

Division of Hematology/Oncology

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EDUCATION

SungKyunKwan University, Rep of Korea, B.A., 1992, Biology

SungKyunKwan University, Rep of Korea, M.S., 1997, Biology

SungKyunKwan University, Rep of Korea, Ph.D., 2003, Immunology

POSTGRADUATE TRAINING

Harvard University, Department of Immunology and Infectious Diseases, Boston, MA, Postdoctoral researcher, 2004-2004

Northwestern University, Department of Microbiology-Immunology, Chicago, IL

Research Associate, 2004-2008

NorthShore University HealthSyustem, **University of Chicago**, Evanston, IL,

Senior Postdoc Researcher, 2008-2011.

Roswell Park Cancer Institute, Department of Cancer Genetics, Buffalo, NY

Postdoctoral Research Associate**,** 2011-2013

Rhode Island Hospital, Dept of Orthopaedics, Providence, RI.

Research Fellow, 2015-Present

Rhode Island Hospital/ The Warren Alpert Medical School at Brown University,

Division of Hematology and Oncology. Providence, RI

T32 Trainee, 2016- 2019 (July-1st)

POSTGRADUATE HONORS and AWARDS

Poster Prize, 1st Research Meeting of Brain Korea 21, Seoul, Korea, 2000

Poster Prize, 3rd Research Meeting of Brain Korea 21, Seoul, Korea, 2002

Post-doctoral Fellowship, Korea Science and Engineering Foundation (KOSEF), 2003

MBL Financial Aid Award, Marine Biological Laboratory, Wood Hole, MA, 2017

MILITARY SERVICE

N/A

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

N/A

ACADEMIC APPINTMENTS

HRI Scientist (Research Scientist), Roswell Park Cancer Institute, Department of Cancer Genetics, 2013 -2015

Instructor, Department of Orthopaedics, The Warren Alpert Medical School at Brown University, 2015-2017

Instructor, Division of Hematology/Oncology, The Warren Alpert Medical School at Brown University, Aug-1-2019 ~ present

HOSTIPAL APPOINTMENTS

Research Fellow (Research Associate), Rhode Island Hospital, July-2015 ~ Present

OTHER APPINTMENTS

Researcher, Jeil Pharmaceutical Co., Ltd, South Korea, 1997-1998

Staff Scientist, The Lentivirus Construct Core of COBRE for Stem Cells and Aging (SCA), 2019~ Present

HOSPITAL COMMITTEES

N/A

UNIVERSITY COMMITTEES

N/A

MEMBERSHIP IN SOCIETIES

Associate Member, American Association for Cancer Research, 2009-2014

Reviewer, *PLOS ONE,* 2013-2015

Reviewer, *Journal of Cancer Biology & Research*, 2013-2016

PUBLICATIONS LIST

ORIGINAL PUBLICATION IN PEER-REVIEWED JOURNALS

1. Kim HI, **So EY**, Yoon SR, Han MY, Lee CE. Up-regulation of IL-4 receptor expression by IL-4 and CD40 ligation (1998). BMB reports (former: J. Biochem. Mol. Biol.) 31: 83-88
2. Park HJ, **So EY**, Lee CE. Interferon-gamma-induced factor binding to the interleukin-4-responsive element of CD23(b) promoter in human tonsillar mononuclear cells : role in transient up-regulation of the IL-4-induced CD23 mRNA(1998). Molecular Immunology 35:239-247
3. **So EY**, Park HH, Lee CE. Interferon-γ and α post-transcriptionally down-regulate the IL-4-induced IL-4 receptor gene expression (2000). J. Immunology; 165: 5472-5479
4. **So EY**, Jang JY, Lee CE. Cross-talk between Jak/STAT and Ras/MAPK pathways for the IL-4-mediated T cell survival (2001). BMB reports 34: 578-584
5. Song JH, **So EY**, Lee CE. Increased serine phophorylation and activation of STAT1 by oncogenic Ras transfection (2002) Mol. Cells 13: 322-326
6. **So EY**, Kim SH, Park HH, Cho BS, Lee CE. Corticosteroid inhibits IL-4 signaling by down-regulation of IL-4 receptor and STAT6 activity (2002). FEBS Letters. 518: 53-59
7. **So EY**, Kang MH, Kim BS. Induction of chemokine and cytokine genes in astrocytes following infection with Theiler's murine encephalomyelitis virus is mediated by the Toll-like receptor 3 (2006). GLIA. 53:858-67.
8. Fuller A, Yahikozawa H, **So EY**, Dal Canto M, Koh CS, Welsh CJ, Kim BS. Castration of male C57L/J mice increases susceptibility and estrogen treatment restores

resistance to Theiler's virus-induced demyelinating disease (2007). J Neurosci Res. 85:871-81.

9. **So EY**, Oh J, Jang JY, Kim JH, Lee CE. Ras/Erk pathway positively regulates Jak1/STAT6 activity and IL-4 gene expression in Jurkat T cells (2007). Mol Immunol. 44:3416-26.
10. Hou W, **So EY**, Kim BS. Role of dendritic cells in differential susceptibility to viral demyelinating disease (2007). PLoS Pathog. 3:e124.
11. Kang MH, **So EY**, Park HS, Kim BS. Replication of Theiler's virus requires NF-kB-activation: Higher viral replication and cellular spread in astrocytes from susceptible SJL/J mice (2008). GLIA. 56:942-53.
12. **So EY** and Kim BS. Theiler's virus infection induces TLR3-dependent up-regulation of TLR2 critical for proinflammatory cytokine production (2009). GLIA. 57(11):1216-26.
13. **So EY** and Ouchi T. The application of Toll like receptors for cancer therapy (2010). Int. J. Bio. Sci. 6(7):675-81
14. **So EY** and Ouchi T. Functional interaction of BRCA1/ATM-assoicated BAAT1 with DNA-PKcs (2011). Experimental and Therapeutic Medicine, 2: 443-447.
15. **So EY**, Ausman M, Saeki T, and Ouchi T. Phosphorylation of SMC1 by ATR is required for Desferrioxamin (DFO)-induced Apoptosis (2011). Cell Death and Disease, 10;2:e128
16. Jin YH*, Kim SJ*, **So EY***, Meng L, Colonna M, and Kim BS. Melanoma differentiation-associated gene 5 is critical for protection against Theiler's virus-induced demyelinating disease (2012). J Virol. 86(3):1531-4 ***Equal contribution**.
17. Kang MA, **So EY**, Simons A, Spitz D, Ouchi T. DNA damage induces Reactive Oxygen Species (ROS) generation through H2AX-Nox1/Rac1pathway. (2012). Cell Death and Disease, 12;3:e249
18. Kang, MA, **So EY**, Ouchi T. Deregulation of the DNA Damage Response Pathway by Intercellular Contact. (2012). J Biol Chem 287(20):16246-55
19. **So EY**, Ouchi T. The Potential Role of BRCA1-Associated ATM Activator-1 (BRAT1) in Regulation of mTOR. (2013) J Cancer Biol Res 1: 3.
20. **So EY**, Kozicki M, Ouchi T. Roles of DNA Damage Response Proteins in Mitogen-Induced Thp-1 Differentiation into Macrophage. (2013) J Cancer Biol Res 1: 3.

21. **So EY** and Ouchi. T. Decreased DNA repair activity in bone marrow due to lack of DNA damage repair proteins (2014). Cancer Biology & Therapy, 15(7): 906–910
22. **So EY** and Ouchi. T. BRAT1 Deficiency Causes Increased Glucose Metabolism and Mitochondrial Malfunction (2014). BMC Cancer, 14(1):548
23. **So EY** and Ouchi. T. Translational initiation regulated by ATM in Dendritic Cells Development (2014). Cell Death and Disease, 5:e1418
24. **So EY**, Ouchi M, Cuesta-Sancho S, Olson SL, Reif D, Shimomura K, Ouchi T. Tumor Suppression by Resistant Maltodextrin, Fibersol-2 (2015). Cancer Biology & Therapy,16(3):460-5.
25. Sancho SC, Olson SL, **So EY**, Shimomura K, Ouchi T, Preuss F. Fibersol-2 induces apoptosis of Apc-deficient colorectal cancer (SW480) cells and decreases polyp formation in Apc MIN mice (2016). Cancer Biol Ther. 17(6):657-63
26. Fernández-Jaén A, Álvarez S, **So EY**, Ouchi T, Jiménez de la Peña M, Duat A, Fernández Mayoralas DM, Fernández-Perrone AL, Albert J, Calleja-Pérez B. Mutations in BRAT1 cause autosomal recessive progressive encephalopathy: Report of a Spanish patient (2016). Eur Paediatr Neurol. 20(3):451-5
27. Kang HS, Myoung J, **So EY**, Bahk YY, Kim BS. Transgenic expression of non-structural genes of Theriler's virus suppresses initial viral replication and pathogenesis of demyelination (2016). J Neuroinflammation. 13(1); 133
28. **So EY**, Dreslinski T, Ouchi. The Screening of a microRNA expression during development of Human macropahges and mouse dendritic cells. (2017) Cancer Biol Ther, 18(3):152-157
29. Wu KQ, Muratore CS, **So EY**, Sun C, Reginato AM, and Liang OD. TNF-α Induced Endothelial to Mesenchymal Transition Promotes Infantile Hemangioma Regression. (2017) Am J Pathol. 187(9): 2102-2111.
30. Liang OD, **So EY**, Egan PC, Goldberg LR, Aliotta JM, Wu K, Dubielecka PM, VEntetuolo CE, Reginato AM, Quesenberry PJ, and Klinger JR. Endothelial to Hematopoietic Transition Contributes to Pulmonary Arterial Hypertension. (2017) Cardiovascular Research, 113(13): 1560-1573
31. **So EY**, Sun C, Reginato AM, Dubielecka PM, Ouchi T, Liang OD. Loss of lipid phosphatase SHIP1 promotes macrophage differentiation through suppression of dendritic cell differentiation. (2019) Cancer Biol Ther, 20(2):201-211

32. Liu M, Jeong EM, Liu H, Xie A, **So EY**, Shi G, Jeong GE, Zhou A, Dudley SC Jr. Magnesium supplementation improves diabetic mitochondrial and cardiac diastolic function. (2019) JCI insight. 4(1). Pii:123182
33. **So EY**, Sun C, Wu KQ, Driesman A, Leggett S, Isaac M, Spangler T, Dubielecka-Szczerba PM, Reginato AM, Liang OD. Lipid phosphatase SHIP-1 regulates chondrocyte hypertrophy and skeletal development. J Cell Physiol. 2020 Feb;235(2):1425-1437. **(Cover article for this issue)**
34. Go GY, Jo A, Seo DW, Kim WY, Kim YK, **So EY**, Chen Q, Kang JS, Bae GU, Lee SJ. Ginsenoside Rb1 and Rb2 upregulate Akt/mTOR signaling mediated muscular hypertrophy and myoblast differentiation. (2020) J Ginseng Res. 44(3):435-441
35. Lee SJ, Im M, Park SK, Kim JY, **So EY**, Liang OD, Kang JS, Bae GU. BST204, a Rg3 and Rh2 Enriched Ginseng Extract, Upregulates Myotube Formation and Mitochondrial Function in TNF-α-Induced Atrophic Myotubes. (2020) Am J Chin Med. 48(3):631-650
36. Zhou L, Huntington K, Zhang S, Carlsen L, **So EY**, Parker C, Sahin I, Safran H, Kamle S, Lee CM, Lee CG, Elias JA, Campbell KS, Naik MT, Atwood WJ, Youssef E, Pachter JA, Navaraj A, Seyhan AA, Liang O, El-Deiry WS. Natural Killer cell activation, reduced ACE2, TMPRSS2, cytokines G-CSF, M-CSF and SARS-CoV-2-S pseudovirus infectivity by MEK inhibitor treatment of human cells**.** (2020) bioRxiv. Aug 3;2020.08.02.230839.

OTHER PEER-REVIEWED JOURNALS

N/A

BOOKS AND BOOK CHAPTERS

N/A

OTHER NON-PEER REVIEWED PUBLICATIONS

N/A

CORPORATE AUTHORSHIP OR MULTICENTER TRIALS

N/A

PUBLICATIONS SUBMUTTED OR PREPARATIO

1. **So EY**, Jeong EM, Wu KQ, Dubielecka, PM, Reginato AM, Quesenberry, PJ. Liang OD. Sexual dimorphism in aging hematopoiesis: An earlier decline of hematopoietic stem and progenitor cells in male than female mice (2020). *Under revision in AGING.*
2. **So EY**, Sun C, Wu KQ, Dubielecka, PM, Reginato AM, Liang OD. Inhibition of lipid phosphatase SHIP1 expands myeloid-derived suppressor cells and attenuates rheumatoid arthritis in mice. (2020). *Under revision in American Journal of Physiology-Cell Physiology.*

ABSTRACTS

N/A

SCHONLARLY WORK PUBLISHED IN OTHER MEDIA

N/A

INVITED PRESENTATIONS

Oral Presentation

1. **So EY**. Essential roles of ATM in Bone marrow differentiation to dendritic cells. *Cell Stress Biology & Cancer Genetics Seminar Series* **2012**
2. **So EY**. The novel roles of BRCA1/ATM-associated 1: in glucose/mitochondrial metabolism and tumor cell growth. *Cell Stress Biology & Cancer Genetics Seminar Series* **2013**
3. **So EY**, The potential role of DDR protein, BRAT1, in growth and mitochondrial functions: the effect of BRAT1 knock down on apoptosis. *Cell Stress Biology & Cancer Genetics Seminar Series* **2014**
4. **So EY,** Ouchi T. The potential role of DNA Damage Response (DDR) proteins in growth and mitochondrial functions. *18th Buffalo DNA Replication & Repair Symposium, Amherst, NY.* **2014**
5. **So EY,** Ouchi T. Novel role of BRAT1 in mitochondrial function and tumor growth. *Roswell Park Cancer Institute Science Retreat.* **2014**

Poster Presentation

1. Hou W, **So EY**, Kim BS. Differential responses of DCs from susceptible and resistant mice to Theiler's virus infection. *The 92th Annual meeting the American Association of Immunologists*. Miami Beach, FL. May. **2007**
2. **So EY**, Kim BS. Distinct functions of IKK-alpha and IKK-beta in the induction of type I IFN and proinflammatory cytokine genes following infection with Theiler's murine encephalomyelitis virus**.** *The 92th Annual meeting the American Association of Immunologists*. Miami Beach, FL. May. **2007**
3. **So EY**, Ouchi T. The potential role a novel brca1-associated protein, BAAT1 in DNA damage response. *2009 fall Scientific Poster Research Reception in University of Chicago.* Chicago IL. Nov. **2009**
4. **So EY**, Ausman M, Saeki T, Ouchi T. Phosphorylation of SMC1 by ATR is required for desferrioxamin (DFO)-induced apoptosis. *2010 Fall Scientific Poster Board Reception.* Evanston, IL. Oct. **2010**
5. **So EY** and Ouchi T. Essential roles of ATM in GM-CSF-induced bone marrow differentiation to dendritic cells. *2012 The 104th Annual Meeting of the American Association for Cancer Research (AACR)*. Chicago, IL. Apr. **2012**
6. **So EY** and Ouchi T. The novel roles of BRCA1/ATM-associated BRAT1 in glucose/mitochondrial metabolism and tumor cell growth. *2013 The 105th Annual Meeting of the American Association for Cancer Research (AACR)*. Washington, DC. Apr. **2013**
7. **So EY**. The novel roles of BRCA1/ATM-associated BRAT1 in glucose/mitochondrial metabolism and tumor cell growth. *2014 Roswell Park Cancer Institute Science Retreat.* Jul. **2014**
8. **So EY,** Sun C, Dubielecka PM, Reginato AM, Liang OD. Inhibition of Lipid Phosphatase SHIP1 Expands Myeloid-Derived Suppressor Cells and Attenuates Rheumatoid Arthritis in Mice. ACR/ARHP annual meeting. Chicago, IL. Oct. **2018**

GRANTS

Active

Sep-1-2020 ~ Aug-31-2021, **Pilot Project Grant** of COBRE for Skeletal Health & Repair from National Institute of General Medical Sciences (5P30GM122732-04): Role: PI

Completed

Aug-1-2016 ~ July-31--2019, **T32 Training Grant** from National Heart, Lung and Blood Institute (T32HL116249): Role: Trainee

UNIVERSITY TEACHING, ADVISING and MENTORING ROLES

1. March 1996-August, 1996, Teaching Assistant, Biology, College of Liberal Arts and Science, Sungkyunkwan University
   -Experiment Laboratory Classes for freshman: This involved assigning/preparing Biology-lab classes and guiding students to be familiar with biological methods.
2. March, 2000-February, 2001, Lecturer, Biological Sciences, School of Natural Sciences, Sungkyunkwan University. Teaching mandate for lecture “The origin of life” (Course of General Education), 6 total class load (credit).
3. September, 2001-February, 2002, Lecturer, Natural Sciences, Sungkyunkwan University. Lecture “Introduction to Reproductive Science” as course of General Education for undergraduate students. Class load at termination: 3
4. March, 2003-February, 2004, Lecturer, Biology Education, Graduate School of Education. Lecture “Molecular Biology I&II” for graduate students of biology education. This involved reading and test about molecular biology, basic& advanced using text book (Recombinant DNA). Also I invited speakers from other department to lecture about “Molecular Biological in Plant”. Class load at termination: 4
5. September 2003-February,2004, Lecuter, Natural Sciences, Sungkyunkwan University. Lecture” Biology” as course of General Education for undergraduate students. I was asked to arrange lecture and evaluate students in general biology lecture.

HOSPITAL TEACHING, ADVISING and MENTORING ROLES

N/A