

# **Curriculum Vitae**

(Last updated: March, 2019)

## **Seulki Lee, Ph.D.**

### **Education and Training**

2008-2009	Postdoc in Radiology Stanford University School of Medicine, Stanford, California
2006-2008	Postdoc in Biomedical Engineering Korea Institute of Science and Technology, Seoul, Korea
2000-2006	M.S. and Ph.D. in Materials Science and Engineering Gwangju Institute of Science and Technology, Gwangju, Korea
1996-2000	B.S. in Polymers Science and Engineering Sungkyunkwan University, Suwon, Korea

### **Professional Experiences**

2012-present	<b>Associate Professor</b> Department of Radiology, with joint appointments in Oncology, Ophthalmology (since 2015) and Materials Science and Engineering, The Johns Hopkins University School of Medicine
2009-2012	<b>Leader (inaugural)</b> Theranostic Nanomedicine Section, National Institute of Biomedical Imaging and Bioengineering (NIBIB), National Institutes of Health (NIH), Bethesda, Maryland

#### Industry Positions

2015-present	Founder, President, Theraly Fibrosis Inc., USA
2016-present	Founder, Interim CEO, Neuraly Inc., USA
2018-present	Founder, Board of Directors, D&D Pharmatech Inc., Korea
2019-present	Founder, President, Precision Molecular Inc., USA

### **Publications** (selected from > 140 publications, citations > 11,000, h-index=59)

1. Park JS, Oh Y, Park YJ, Park O, Yang H, Slania S, Hummers LK, Shah AA, An HT, Jang J, Horton MR, Shin J, Dietz HC, Song E, Na DH, Park EJ, Kim K, Lee KC, Roschke VV, Hanes J, Pomper MG, Lee S, Targeting of dermal myofibroblasts through death receptor 5 arrests fibrosis in mouse models of scleroderma. **Nature Communications**, 2019; 10(1):1128.
2. Yun SP, Kam TI, Panicker N, Kim SM, Oh U, Park SH, Kwon SH, Park YJ, Karuppagounder SS, Park H, Kim S, Oh N, Kim NA, Lee S, Brahmachari S, Mao X, Lee JH, Kumar M, An D, Kang SU, Lee Y, Lee KC, Na DH, Kim D, Lee SH, Liddel SA, Mari Z, Barres BA, Dawson VL, Lee S\*, Dawson TM\*, Ko HS\*, Block of A1 astrocyte conversion

is neuroprotective in models of Parkinson's disease, **Nature Medicine**, 2018; 24(7):931-938, \*Co-corresponding author

3. Kim D, Yoo HM, Hwang H, Lee J, Lee SH, Yun SP, Park MJ, Lee MJ, Choi S, Kwon SH, Lee S, Kwon SH, Kim S, Park YJ, Kinoshita M, Lee YH, Shin S, Paik SR, Lee S, Hong BH, Ko HS, Graphene quantum dots prevent a-synuclein transmission in Parkinson's disease, **Nature Nanotechnology**, 2018; 13(9): 812-818.
4. Park JS, Oh Y, Park O, Foss CA, Lim CA, Lim SM, Jo DG, Na DH, Pomper MG, Lee KC, Lee S, PEGylated TRAIL ameliorates experimental inflammatory arthritis by regulation of Th17 cells and regulatory T cells, **Journal of Controlled Release**, 2017; 267:163-171.
5. Oh Y, Ogyi Park, Swierczewska M, Hamilton JO, Park JS, Kim TH, Lim SM, Eom H, Jo DG, Lee CE, Kechrid R, Mastorakos P, Zhang C, Hahn SK, Jeon OC, Byun R, Kim K, Hanes J, Lee KC, Pomper MG, Gao B, Lee S, Systemic PEGylated TRAIL treatment ameliorates liver cirrhosis in rats by eliminating activated hepatic stellate cells. **Hepatology**, 2016, 2016; 64(1): 209-23,
6. Swierczewska M, Han HS, Kim K, Park JH, Lee S, Polysaccharide-based nanoparticles for theranostic nanomedicine. **Advanced Drug Delivery Review**, 2016; 99(Pt A):70-84
7. Oh Y, Swierczewska M, Kim TH, Lim SM, Eom HN, Park JH, Na DH, Kim K, Lee KC, Pomper MG, Lee S, Delivery of tumor-homing TRAIL sensitizer with long-acting TRAIL as a therapy for TRAIL-resistant tumors. **Journal of Controlled Release**, 2015; 220(Pt B): 671-81.
8. Choi KY, Silvestre OF, Huang X, Hida N, Liu G, Ho DN, Lee S, Lee SW, Hong JI, Chen X, Novel nanoparticle formula for delivering siRNA or miRNAs to tumor cells in cell culture and in vivo. **Nature Protocols**, 2014; 9(8): 1900-1915.
9. Kim TH, Swierczewska M, Oh Y, Kim A, Jo DG, Park JH, Byun Y, Sadegh-Nasseri S, Pomper MG, Lee KC\*, Lee S\*, Mix to validate: a facile, reversible PEGylation for fast screening of potential therapeutic proteins in vivo. **Angewandte Chemie International Edition**. 2013; 52(27): 6880-6884. \*Co-corresponding author [Cover feature]
10. Swierczewska M, Choi KY, Mertz EL, Huang X, Zhang F, Zhu L, Youn HY, Park JH, Bhirde A, Lee S\*, Chen X\*, A facile, one-step nanocarbons functionalization for biomedical applications. **Nano Letters**. 2012; 12(7): 3613-3620. \*Co-corresponding author

## **Honors and Awards**

2017	Highly Cited Researchers (Clarivate Analytics)
2017	Edward N. and Della L. Thome Memorial Foundation Award
2016	Peer Reviewed Cancer Highlights, Department of Defense
2016	Maryland Innovation Initiate Award, TEDCO, Maryland
2015	Investigator-Initiated Research Award, Peer Reviewed Medical Research Program, Department of Defense
2014	Career Development Award, Peer Reviewed Cancer Research Program, Department of Defense
2013	Maryland Stem Cell Commission Grant Award, TEDCO, Maryland
2013	NIH Pathway to Independence Award (R00), NIH
2011	NIH Pathway to Independence Award (K99), NIH
2010	NRC Associateship (NIH/NIST), National Academy of Sciences
2009	WMIC Annual Congress Travel Award, World Molecular Imaging Society