

Stanford



Siyeon Rhee

Instructor, Cardiovascular Institute

 Curriculum Vitae available Online

Bio

ACADEMIC APPOINTMENTS

- Instructor, Cardiovascular Institute

HONORS AND AWARDS

- Scholarship Award, Santa Cruz Developmental Biology Meeting, Santa Cruz, CA (2018)
- Best Talk Award, 2nd Annual CVI Postdoctoral Conference, Stanford, CA (2017)
- Outstanding Student Award, New England Bioscience Society, Boston, MA (2015)
- Poster Award, 2nd place, Activated Egg Symposium, Boston, MA (2013)
- Travel Grant Award, Annual Meeting of Society of Developmental Biology, Montreal, Canada (2012)
- Poster award, 1st place, Northeast Regional Meeting of the Society for Developmental Biology, Woods Hole, MA (2010)
- Poster award, 1st place, Annual Meeting of Animal Science Society in Korea (2004)
- Travel Grant Award, Visiting Japan as a student representative for Korea University (2002)
- Academic scholarship award, PURINA Korea (2001)

Publications

PUBLICATIONS

- **Endocardial/endothelial angiocrines regulate cardiomyocyte development and maturation and induce features of ventricular non-compaction.** *European heart journal*
Rhee, S., Paik, D. T., Yang, J. Y., Nagelberg, D., Williams, I., Tian, L., Roth, R., Chandy, M., Ban, J., Belbachir, N., Kim, S., Zhang, H., Phansalkar, et al
2021
- **miR-106a-363 cluster in extracellular vesicles promotes endogenous myocardial repair via Notch3 pathway in ischemic heart injury.** *Basic research in cardiology*
Jung, J. H., Ikeda, G. n., Tada, Y. n., von Bornstädt, D. n., Santoso, M. R., Wahlquist, C. n., Rhee, S. n., Jeon, Y. J., Yu, A. C., O'brien, C. G., Red-Horse, K. n., Appel, E. A., Mercola, et al
2021; 116 (1): 19
- **Identification of Lymphatic and Hematogenous Routes of Rapidly Labeled Radioactive and Fluorescent Exosomes through Highly Sensitive Multimodal Imaging.** *International journal of molecular sciences*
Jung, K. O., Kim, Y., Chung, S., Lee, C., Rhee, S., Pratz, G., Chung, J., Youn, H.
2020; 21 (21)
- **Single-Cell RNA-seq Unveils Unique Transcriptomic Signatures of Organ-Specific Endothelial Cells.** *Circulation*
Paik, D. T., Tian, L., Williams, I. M., Rhee, S., Zhang, H., Liu, C., Mishra, R., Wu, S. M., Red-Horse, K., Wu, J. C.
2020

- **Single-cell and spatial transcriptomics approaches of cardiovascular development and disease** *BMB REPORTS*
Roth, R., Kim, S., Kim, J., Rhee, S.
2020; 53 (8): 393–99
- **Wnt Activation and Reduced Cell-Cell Contact Synergistically Induce Massive Expansion of Functional Human iPSC-Derived Cardiomyocytes.** *Cell stem cell*
Buikema, J. W., Lee, S. n., Goodyer, W. R., Maas, R. G., Chirikian, O. n., Li, G. n., Miao, Y. n., Paige, S. L., Lee, D. n., Wu, H. n., Paik, D. T., Rhee, S. n., Tian, et al
2020; 27 (1): 50–63.e5
- **Whole-body tracking of single cells via positron emission tomography.** *Nature biomedical engineering*
Jung, K. O., Kim, T. J., Yu, J. H., Rhee, S. n., Zhao, W. n., Ha, B. n., Red-Horse, K. n., Gambhir, S. S., Pratz, G. n.
2020
- **KEAP1/NFE2L2 mutations predict lung cancer radiation resistance that can be targeted by glutaminase inhibition.** *Cancer discovery*
Binkley, M. S., Jeon, Y. J., Nesselbush, M. n., Moding, E. J., Nabet, B. Y., Almanza, D. n., Kunder, C. n., Stehr, H. n., Yoo, C. H., Rhee, S. n., Xiang, M. n., Chabon, J. J., Hamilton, et al
2020
- **A Unique Collateral Artery Development Program Promotes Neonatal Heart Regeneration.** *Cell*
Das, S., Goldstone, A. B., Wang, H., Farry, J., D'Amato, G., Paulsen, M. J., Eskandari, A., Hironaka, C. E., Phansalkar, R., Sharma, B., Rhee, S., Shamskhov, E. A., Agalliu, et al
2019
- **miRNA-mediated TUSC3 deficiency enhances UPR and ERAD to promote metastatic potential of NSCLC.** *Nature communications*
Jeon, Y., Kim, T., Park, D., Nuovo, G. J., Rhee, S., Joshi, P., Lee, B., Jeong, J., Suh, S., Grotzke, J. E., Kim, S., Song, J., Sim, et al
2018; 9 (1): 5110
- **Characterization of brain dysfunction induced by bacterial lipopeptides that alter neuronal activity and network in rodent brains.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*
Kim, K., Zamaleeva, A. I., Woo Lee, Y., Ahmed, M. R., Kim, E., Lee, H., Raveendra Pothineni, V., Tao, J., Rhee, S., Jayakumar, M., Inayathullah, M., Sivanesan, S., Red-Horse, et al
2018
- **Large-Scale Single-Cell RNA-Seq Reveals Molecular Signatures of Heterogeneous Populations of Human Induced Pluripotent Stem Cell-Derived Endothelial Cells.** *Circulation research*
Paik, D. T., Tian, L., Lee, J., Sayed, N., Chen, I. Y., Rhee, S., Rhee, J., Kim, Y., Wirka, R. C., Buikema, J. W., Wu, S. M., Red-Horse, K., Quertermous, et al
2018
- **Nucleic adaptability of heterokaryons to fungicides in a multinucleate fungus, *Sclerotinia homoeocarpa*** *FUNGAL GENETICS AND BIOLOGY*
Kessler, D., Sang, H., Bousquet, A., Hulvey, J. P., Garcia, D., Rhee, S., Hoshino, Y., Yamada, T., Jung, G.
2018; 115: 64–77
- **Endothelial deletion of *Ino80* disrupts coronary angiogenesis and causes congenital heart disease.** *Nature communications*
Rhee, S. n., Chung, J. I., King, D. A., D'Amato, G. n., Paik, D. T., Duan, A. n., Chang, A. n., Nagelberg, D. n., Sharma, B. n., Jeong, Y. n., Diehn, M. n., Wu, J. C., Morrison, et al
2018; 9 (1): 368
- **Single-cell murine genetic fate mapping reveals bipotential hepatoblasts and novel multi-organ endoderm progenitors** *Development*
El Sebae, G. K., Malatos, J. M., Cone, M. E., Rhee, S., Angelo, J. R., Mager, J., Tremblay, K. D.
2018
- **Single-cell analysis of early progenitor cells that build coronary arteries.** *Nature*
Su, T. n., Stanley, G. n., Sinha, R. n., D'Amato, G. n., Das, S. n., Rhee, S. n., Chang, A. H., Poduri, A. n., Raftrey, B. n., Dinh, T. T., Roper, W. A., Li, G. n., Quinn, et al
2018
- **Endothelial cells respond to the direction of mechanical stimuli through SMAD signaling to regulate coronary artery size.** *Development (Cambridge, England)*
Poduri, A. n., Chang, A. H., Raftrey, B. n., Rhee, S. n., Van, M. n., Red-Horse, K. n.
2017; 144 (18): 3241–52

- **cis-regulatory control of Mesp1 expression by YY1 and SP1 during mouse embryogenesis** *DEVELOPMENTAL DYNAMICS*
Beketaev, I., Zhang, Y., Weng, K., Rhee, S., Yu, W., Liu, Y., Mager, J., Wang, J.
2016; 245 (3): 379–87
- **FGF Signaling is Required for Anterior but not Posterior Specification of the Murine Liver Bud** *DEVELOPMENTAL DYNAMICS*
Wang, J., Rhee, S., Palaria, A., Tremblay, K. D.
2015; 244 (3): 431–43
- **Visceral Endoderm Expression of Yin-Yang1 (YY1) Is Required for VEGFA Maintenance and Yolk Sac Development** *PLOS ONE*
Rhee, S., Guerrero-Zayas, M., Wallingford, M. C., Ortiz-Pineda, P., Mager, J., Tremblay, K. D.
2013; 8 (3): e58828
- **Effects of trans-10,cis-12 Conjugated Linoleic Acid on Body Composition in Genetically Obese Mice** *JOURNAL OF MEDICINAL FOOD*
Hur, S., Whitcomb, F., Rhee, S., Park, Y., Good, D. J., Park, Y.
2009; 12 (1): 56–63
- **Influence of encapsulation of emulsified lipids with chitosan on their in vivo digestibility** *FOOD CHEMISTRY*
Park, G., Mun, S., Park, Y., Rhee, S., Decker, E. A., Weiss, J., McClements, D., Park, Y.
2007; 104 (2): 761–67

PRESENTATIONS

- Endothelial deletion of Ino80 disrupts coronary angiogenesis and causes left ventricle non-compaction - 2nd Annual CVI Postdoctoral Conference