

CURRICULUM VITAE
JONG-EUN PARK, Ph.D.

Address: Wellcome Genome Campus, Hinxton, Cambridgeshire, CB10 1SA, UK
Email: jp24@sanger.ac.uk

Education / Positions held

2020.9-	Assistant Professor , Graduate School of Medical Science and Engineering, KAIST
2017.3-2020.8	Postdoctoral fellow , Wellcome Sanger Institute, United Kingdom Advisor: Prof. Sarah A. Teichmann
2015.9-2017.2	Postdoctoral fellow , Seoul National University, South Korea Advisor: Prof. V. Narry Kim
2009.3-2015.8	Ph.D. in Biological Sciences , Seoul National University, South Korea Advisor: Prof. V. Narry Kim Thesis: "Study on the mechanism of substrate recognition by Dicer"
2007.8-2008.7	Exchange Student , Vanderbilt University, USA
2005.3-2009.2	B.S. in Biological Sciences (<i>summa cum laude</i>), Seoul National University, South Korea

Publications

1. **Park, J.-E.***, Heo, I.*, Tian, Y., Simanshu, D.K., Chang, H., Jee, D., Patel, D.J., Kim, V.N., 2011. Dicer recognizes the 5' end of RNA for efficient and accurate processing. **Nature** 475, 201–205.
2. Heo, I.*, Ha, M.*, Lim, J., Yoon, M.-J., **Park, J.-E.**, Kwon, S.C., Chang, H., Kim, V.N., 2012. Mono-uridylation of pre-microRNA as a key step in the biogenesis of group II let-7 microRNAs. **Cell** 151, 521–532.
3. Tian, Y.*, Simanshu, D.K.*, Ma, J.-B., **Park, J.-E.**, Heo, I., Narry Kim, V., Patel, D.J., 2014. A Phosphate-Binding Pocket within the Platform-PAZ-Connector Helix Cassette of Human Dicer. **Molecular Cell**. 53, 606-616.
4. Kim, Y.*, Lee, J.H., **Park, J.-E.**, Cho, J., Yi, H., Kim, V.N., 2014. PKR is activated by cellular dsRNAs during mitosis and acts as a mitotic regulator. **Genes Dev.** 28, 1310–1322.
5. Boo, K.*, Bhin, J.*, Jeon, Y., Kim, J., Shin, H.-J.R., **Park, J.-E.**, Kim, K., Kim, C.R., Jang, H., Kim, I.-H., Kim, V.N., Hwang, D., Lee, H., Baek, S.H., 2015. Pontin functions as an essential coactivator for Oct4-dependent lincRNA expression in mouse embryonic stem cells. **Nature communications** 6, 6810.
6. Sim, S.-E., Lim, C.-S., Kim, J.-I., Seo, D., Chun, H., Yu, N.-K., Lee, J., Kang, S.J., Ko, H.-G., Choi, J.-H., Kim, T., Jang, E.-H., Han, J., Bak, M.S., **Park, J.-E.**, Jang, D.-J.,

- Baek, D., Lee, Y.-S., Kaang, B.-K., 2016. The Brain-Enriched MicroRNA miR-9-3p Regulates Synaptic Plasticity and Memory. **J. Neurosci.** 36, 8641–8652.
7. **Park, J.-E.***, Yi, H.*, Kim, Y.*, Chang, H., Kim, V.N., 2016. Regulation of Poly(A) Tail and Translation during the Somatic Cell Cycle. **Molecular Cell.** 62, 462–471.
 8. Son, A.*, **Park, J.-E.***, Kim, V.N., 2018. PARN and TOE1 Constitute a 3' End Maturation Module for Nuclear Non-coding RNAs. **Cell Reports.** 23, 888–898.
 9. **Park, J.-E.***, Polanski, K.*, Meyer, K., Teichmann, S.A., 2018. Fast batch alignment of single cell transcriptomes unifies multiple mouse cell atlases into an integrated landscape. **bioRxiv.** 397042. (*Published in Bioinformatics, 2019, Polanski et. al.*)
 10. Vento-Tormo, R.*, Efremova, M.*, Botting, R.A., Turco, M.Y., Vento-Tormo, M., Meyer, K.B., **Park, J.-E.**, Stephenson, E., Polański, K., Goncalves, A., Gardner, L., Holmqvist, S., Henriksson, J., Zou, A., Sharkey, A.M., Millar, B., Innes, B., Wood, L., Wilbrey-Clark, A., Payne, R.P., Ivarsson, M.A., Lisgo, S., Filby, A., Rowitch, D.H., Bulmer, J.N., Wright, G.J., Stubbington, M.J.T., Haniffa, M., Moffett, A., Teichmann, S.A., 2018. Single-cell reconstruction of the early maternal-fetal interface in humans. **Nature** 563, 347–353.
 11. Pramanik, J.*, Chen, X., Kar, G., Henriksson, J., Gomes, T., **Park, J.-E.**, Natarajan, K., Meyer, K.B., Miao, Z., McKenzie, A.N.J., Mahata, B., Teichmann, S.A., 2018. Genome-wide analyses reveal the IRE1a-XBP1 pathway promotes T helper cell differentiation by resolving secretory stress and accelerating proliferation. **Genome Medicine** 10, 76.
 12. Hagai, T.*, Chen, X., Miragaia, R.J., Rostom, R., Gomes, T., Kunowska, N., Henriksson, J., **Park, J.-E.**, Proserpio, V., Donati, G., Bossini-Castillo, L., Vieira Braga, F.A., Naamati, G., Fletcher, J., Stephenson, E., Vegh, P., Trynka, G., Kondova, I., Dennis, M., Haniffa, M., Nourmohammad, A., Lässig, M., Teichmann, S.A., 2018. Gene expression variability across cells and species shapes innate immunity. **Nature** 563, 197–202.
 13. Polański, K.*, Young, M.D.*, Miao, Z., Meyer, K.B., Teichmann, S.A. and **Park, J.-E.**, 2019. BBKNN: Fast Batch Alignment of Single Cell Transcriptomes. **Bioinformatics.** 36, 964-965
 14. Popescu, D.-M.*, Botting, R.A.*, Stephenson, E.*, Green, K., Jardine, L., Calderbank, E.F., Efremova, M., Acres, M., Maunder, D., Vegh, P., Goh, I., Gitton, Y., **Park, J.-E.**, Polanski, K., Vento-Tormo, R., Miao, Z., Rowell, R., McDonald, D., Fletcher, J., Dixon, D., Poyner, E., Reynolds, G., Mather, M., Moldovan, C., Mamanova, L., Greig, F., Young, M., Meyer, K., Lisgo, S., Bacardit, J., Fuller, A., Millar, B., Innes, B., Lindsay, S., Stubbington, M.J.T., Kowalczyk, M.S., Li, B., Ashenbrg, O., Tabaka, M., Dionne, D., Tickle, T.L., Slyper, M., Rozenblatt-Rosen, O., Filby, A., Villani, A.-C., Roy, A., Regev, A., Chedotal, A., Roberts, I., Göttgens, B., Laurenti, E., Behjati, S., Teichmann, S.A., Haniffa, M., 2019. Decoding the development of the blood and immune systems during human fetal liver haematopoiesis. **Nature** 574, 365–371
 15. **Park, J.-E.***, Botting, R.A., Domínguez-Conde, C., Popescu, D.-M., Lavaert, M., Kunz, D.J., Goh, I., Stephenson, E., Ragazzini, R., Tuck, E., Wilbrey-Clark, A., Roberts, K., Kedlian, V.R., Ferdinand, J.R., He, X., Webb, S., Maunder, D., Vandamme, N., Mahbubani, K., Polanski, K., Mamanova, L., Bolt, L., Crossland, D., de Rita, F., Fuller, A., Filby, A., Reynolds, G., Dixon, D., Saeb-Parsy, K., Lisgo, S., Henderson, D.,

- Vento-Tormo, R., Bayraktar, O.A., Barker, R.A., Meyer, K.B., Saeys, Y., Bonfanti, P., Behjati, S., Clatworthy, M.R., Taghon, T., Haniffa, M., Teichmann, S.A., 2020, A cell atlas of human thymic development defines T cell repertoire formation. **Science** 367, eaay3224
16. Efremova, M.*, Vento-Tormo, R.*, **Park, J.-E.***, Teichmann, S. A. & James, K. R. Immunology in the Era of Single-Cell Technologies. 2020, **Annu. Rev. Immunol.** 38, 727-757
 17. **Park, J.-E.***, Jardine, L.*, Gottgens, B., Teichmann, S.A., Haniffa, M., 2020. Prenatal development of human immunity. **Science** 368, 600–603.
 18. Lavaert, M., Liang, K.L., Vandamme, N., **Park, J.-E.**, Roels, J., Kowalczyk, M.S., Li, B., Ashenberg, O., Tabaka, M., Dionne, D., Tickle, T.L., Slyper, M., Rozenblatt-Rosen, O., Vandekerckhove, B., Leclercq, G., Regev, A., Van Vlierberghe, P., Guillems, M., Teichmann, S.A., Saeys, Y., Taghon, T., 2020. Integrated scRNA-Seq Identifies Human Postnatal Thymus Seeding Progenitors and Regulatory Dynamics of Differentiating Immature Thymocytes. **Immunity**.
 19. Choi, J., **Park, J.-E.**, Tsagkogeorga, G., Yanagita, M., Koo, B.-K., Han, N., Lee, J.-H., 2020, Inflammatory Signals Induce AT2 Cell-Derived Damage-Associated Transient Progenitors that Mediate Alveolar Regeneration, **Cell Stem Cell** 27, 366-382.e7

Fellowships and Awards

2020-2022	EMBO Advanced Fellowship (5 fellows selected every year)
2017-2019	EMBO Long-term Fellowship
2015	Best Ph.D. Thesis Award (College of Natural Sciences, Seoul National University)
2012-2015	Research Fellowship, Fostering Core Leaders of the Future Basic Science Program (~60,000 USD/year)
2005-2008	National Science & Technology Scholarship

Presentations

2019	10X Genomics 2019 User Group Meeting (oral)
2019	EMBO Workshop: T cell and thymus biology (oral)
2018	10X Genomics 2018 User Group Meeting (oral)
2018	CONTROL-T Symposium (oral)
2016	EMBL Symposium: The Complex Life of mRNA (oral)
2015	CSHL Meeting on Systems Biology: Global Regulation of Gene Expression (oral)
2014	Keystone Symposia on Long Noncoding RNAs (poster)
2014	2 nd UK-Korea mitosis meeting (oral)
2013	Keystone Symposia on Noncoding RNAs in Development and Cancer (poster)