

# CURRICULUM VITAE

**Jeongeun Lee**

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## EDUCATION

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- 2014 - current                      Seoul National University, Ph.D. candidate  
Major: Interdisciplinary Program for Bioengineering  
Advisor: Jinwook Choi, M.D. Ph.D. & Murim Choi, Ph.D.
- 2012 - 2014                        Seoul National University, M.S.  
Major: Interdisciplinary Program for Bioengineering  
Advisor: Jinwook Choi, M.D. Ph.D.
- 2006 - 2012                        Hanyang University, B.A.  
Major: Media Communications Engineering (Electrical  
Engineering) with an honor of summa cum laude

## PUBLICATIONS

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- Lee, J.**, Lee, J., Jeon, S., Lee, J., Jang, I., Yang, J. O., ... & Choi, M. (2022). A database of 5305 healthy Korean individuals reveals genetic and clinical implications for an East Asian population. *Experimental & molecular medicine*, doi.org/10.1038/s12276-022-00871-4
- Park, S., Jang, S. S., Lee, S., Kim, M., Sim, H., Jeon, H., Hong, S. E., Lee, J., **Lee, J.**, ... & Chae, J. H. (2022). Systematic analysis of inheritance pattern determination in genes that cause rare neurodevelopmental diseases. *Frontiers in genetics* **13**, 990015. doi.org/10.3389/fgene.2022.990015
- Hong, S. E., Kneissl, J., Cho, A., Kim, M. J., Park, S., **Lee, J.**, Woo, S., ... & Choi, M. (2022). Transcriptome-based variant calling and aberrant mRNA discovery enhance diagnostic efficiency for neuromuscular diseases. *Journal of medical genetics* **59(11)**, 1075-1081. doi.org/10.1136/jmedgenet-2021-108307
- Lee, Y., Park, S., Lee, J.S., Kim, S.Y., Cho, J., Yoo, Y., Lee, S., Yoo, T., Lee, M., Seo, J., **Lee, J.**, ... & Chae, J. (2020). Genomic profiling of 553 uncharacterized neurodevelopment patients reveals a high proportion of recessive pathogenic variant carriers in an outbred population. *Scientific reports* **10**, 1413. doi.org/10.1038/s41598-020-58101-8

- Lee, J.**, Song, H. J., Yoon, E., Park, S. B., Park, S. H., Seo, J. W., ... & Choi, J. (2018). Automated extraction of Biomarker information from pathology reports. *BMC medical informatics and decision making* **18**, 29. doi.org/10.1186/s12911-018-0609-7
- Cha, S., **Lee, J.**, Shin, J. Y., Kim, J. Y., Sim, S. H., Keam, B., ... & Kim, J. I. (2016). Clinical application of genomic profiling to find druggable targets for adolescent and young adult (AYA) cancer patients with metastasis. *BMC cancer* **16**, 170. doi.org/10.1186/s12885-016-2209-1
- Yun, J. M., Hwang, S. J., Anh, S. Y., Lee, S. M., Kang, P., **Lee, J.**, ... & Park, P. (2015). Development of biomarker positivity analysis system for cancer diagnosis based on clinical data. *Bio-medical materials and engineering* **26(s1)**, S2101-S2111. doi.org/10.3233/BME-151516
- Kim, J. Y., **Lee, J.**, Cha, S., Lee, S. H., & Kim, J. I. (2015). An explorative study using next generation sequencing of papillary renal cell carcinoma, type 2. *International Journal of Scientific and Research Publication* **5(1)**.
- Choi, S., **Lee, J.**, & Choi, J. (2013). SNUMedinfo at ImageCLEF 2013: Medical Retrieval Task. In *CLEF (Working Notes)*.

## CONFERENCE PRESENTATIONS

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### TALKS

- Lee, J.**, Song, H. J., Yoon, E., Park, S. B., Park, S. H., Seo, J. W., ... & Choi, J. (2014). Development of Biomarker Knowledge Base from Pathology Reports Using Natural Language Processing Techniques. Talk presented at the *Korean Society of Medical Informatics* conference. Seoul, South Korea
- Lee, J.**, Song, H. J., Yoon, E., Park, S. B., Park, S. H., Seo, J. W., ... & Choi, J. (2013). Biomarker Information Extraction from Non-structured Immunohistochemistry Reports with Biomarker Thesaurus. Talk presented at the *Korean Society of Medical Informatics* conference. Seoul, South Korea.

### POSTERS

- Lee, J.**, Lee, J., Jeon, S., Lee, J., Jang, I., Yang, J. O., ... & Choi, M. (2022). A database of 5305 healthy Korean individuals reveals genetic and clinical implications for an East Asian population. *Korean Society for Molecular and Cellular Biology, Jeju, South Korea*
- Lee, J.**, Seo, J., Kim, Y., Mook-Jung, I., Choi, M. (2018). Somatic LINE-1 retrotransposition in the Alzheimer brain genome. Poster presented at *FASEB 2018 Transcription, Chromatin and Epigenetics*, Florence, Italy.
- Lee, J.**, Jazi, A.Y., Seong, M. Choi, J. (2015). Clinical Interpretation Pipeline of Targeted Next-Generation Sequencing Cardiovascular Panels. Poster presented at the *Translational Bioinformatics Conference*, Tokyo, Japan.

Cha, S., **Lee, J.**, Shin, J., Kim, J., Kim, J., Lee, S. (2015) Patient-specific genomic profiling for advanced cancers in young adults. Poster presented at the American Association for Cancer Research Annual Meeting, Philadelphia, U.S.

## **PROJECT EXPERIENCE**

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2021 - current Population specific sc-eQTL analysis from Asian Immune Diversity Atlas

2021 - current Genetic contribution on TCR/BCR clonality and naïve repertoire

2016 - 2021 Commercialization of SNUH genomic knowledge DB solution with which clinicians and bioinformaticians can manage patient's report and share novel insights on a case with colleagues

2014 - 2017 Development of online resource providing pathology information including biomarker levels, anatomical pathology features, and clinical pathology features

## **TEACHING EXPERIENCE**

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2022.07.19. 16<sup>th</sup> Asian Institute in Statistical Genetics and Genomics. Seoul, Korea  
Title 1: "Analysis of single-cell RNA sequencing data"  
Title 2: "Analysis of whole genome sequencing data using cloud computing"

2021.06.28. (online) 15<sup>th</sup> Asian Institute in Statistical Genetics and Genomics. Seoul, Korea  
Title: "Analysis of whole genome sequencing data"

2020.07. (online) Korean Bioinformation Center, Korea  
Title: "Analysis of structural variants for whole exome sequencing data"

2019.07.15. 14<sup>th</sup> Asian Institute in Statistical Genetics and Genomics. Seoul, Korea  
Title: "Analysis of whole genome sequencing data"

2018.07.19. 13<sup>th</sup> Asian Institute in Statistical Genetics and Genomics. Seoul, Korea  
Title: "Genomic data analysis using deep learning algorithm"

2014 - 2016 Seoul National University College of Medicine, Seoul, Korea  
Title: "Data processing of medical data", 1<sup>st</sup> semester

## **HONORS AND AWARDS**

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2006 - 2012 Hanyang University 2010 Full Scholarship.