WON LEE

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EDUCATION

Columbia University, New York, NY — May 2020
PhD in Psychology, GPA 4.0/4.0, Visiting scholar at UT Austin (2017 – 2020)
Dissertation: *Behavioral, physiological, and neurobiological plasticity of mice living in social hierarchies*
Selected honors/awards: Samsung Scholarship ($250,000), Dean's Fellow, Neuroscience Fellow

Teachers College, Columbia University, New York, NY — July 2015
MS in Neuroscience and Education, GPA 3.9/4.0

Seoul National University, Seoul, South Korea — August 2013
BS in Biology Education**,** minor in Psychology, GPA 4.12/4.30
University medal (the valedictorian of the College of Education), Summa Cum Laude
Exchange student at **George Washington University**, Washington, DC (2011 –2012)

EXPERIENCE

Postdoctoral Researcher — June 2020 – Present
Champagne & Curley Social Neurobiology Lab, The University of Texas at Austin — Austin, TX

- Tackle challenges in analyzing gene expression data encompassing heterogeneity across multiple brain regions by implementing machine learning and network analysis approach combined with bioinformatics knowledge, aiming to identify key driver genes contributing to stress resilience
- Lead collaborative bioinformatics analysis projects with three labs (Northwestern, NYU, UT Austin)
- Consult with graduate students on statistical modeling, data analysis, and scientific writing

Graduate Research Fellow — April 2014 – May 2020
Champagne & Curley Social Neurobiology Lab, Columbia University & University of Texas at Austin

- Published 10 research articles (5 first-authored, 2 from outside-of-institution collaborations)
- Applied hierarchical modeling and Bayesian statistics to properly model biological data associated with social behavior and stress resilience using R and Python
- Pivotal contribution in establishing a new lab at UT Austin resulting in 18% of saving from the original lab relocation budget (construction and floor design, equipment purchase, recruitment, communication liaison**)**
- Designed and conducted time-sensitive experiments involving refinement of multiple state-of-art lab techniques to investigate the association among stress resilience, immune system, and brain gene expression
- Developed new behavioral observation survey and paradigm to better capture the social behavior of group-living mice and efficiently collect biological samples with low cost
- Presented 4 times at prestigious conferences, invited to present in an international conference, initiated three new out-of-institution collaborations by actively networking at the conferences
- Trained 12 undergraduate students on animal handling, behavioral observation, wet lab protocols then assigned and supervised them based on each student's talent and interest

High school Biology Teacher — September 2013 – January 2014
Mae-tan High School — Suwon, South Korea

- Developed digital handouts and teaching materials for 11th Biology I and 12th-grade Biology II
- Supervised science projects with 5 teams of gifted students and one of them won the first prize in National Science Creativity Competition

LEADERSHIP & EXTRACURRICULAR ACTIVITY

Columbia University, Teaching assistant (2015 – 2017), research mentor for honors students (2016 – 2018)
Seoul National University, College vice president (2010 – 2011), Class president (2009 – 2010)
Teach For Equality Seoul, Pro bono science and math tutor (2009 – 2011)

SKILLS & INTERESTS

- Skills: Data analysis and visualization in R, Python, and bash, Bayesian statistics, grant and protocol writing
- Hobbies: Hiking, camping, data mining and visualization on US National and State parks stat, running, yoga
- Language: Korean (native), English (fluent)