

MISSION

Empower people to live healthily to 100 years by providing accurate & personalized prediction of disease risk, effective treatment, and health outcome.

CURRENT POSITION

Assistant Professor, Genetics and Genomic Sciences 2018 October-Present
Faculty, Mount Sinai Center for Transformative Disease Modeling
Faculty, Icahn Institute for Data Science and Genomic Technology
Associate Member, Tisch Cancer Institute
Icahn School of Medicine at Mount Sinai, NY, USA

Address: 1399 Park Avenue, 4 - 420-C
New York, NY 10029
Tel: (212) 824-6134 (x56134)
Email: kuan-lin.huang@mssm.edu
Lab website: www.ComputationalOmicsLab.org
Personal website: www.KuanLinHuang.com

Co-Founder and Chief Unboxer, OpenBoxScience.Org 2020 May-Present
Open Box Science is a non-for-profit organization started during the 2020 COVID-19 pandemic to provide free, high-quality research talks for scientists over the world. Open Box Science (OBS) has hosted over 100 virtual talks in a year.

EDUCATION

Postdoctoral Research Fellow, Cancer Proteomics, Washington University in St. Louis, MO 2018 September
Advisor: Dr. Li Ding (Cancer Omics Software)

Ph.D., Genetics and Genomics, Washington University in St. Louis, MO 2018 February
Dissertation: *Multi-omics Portraits of Cancer*
Advisor: Dr. Li Ding (Cancer Genomics, 2014-2018)
Drs. Alison M. Goate and Carlos Cruchaga (Statistical Genetics/Alzheimer's Disease, 2013-2014)

B.A., Wesleyan University, Middletown, CT 2012 May
Honors thesis research in Molecular Biology & Biochemistry (Advisor: Dr. Scott G. Holmes)
Honors thesis exhibition in Studio Art (Advisor: Jeffrey Schiff)
The only person in the 2012 class to complete 2 *honors* dissertations, among multiple undergraduate awards.

PUBLICATIONS

[*Co-first authors. #Co-corresponding authors. %Consortium authorship.]

Peer-Reviewed Original Contributions:

1. Lee W, Wang Z, Saffern M, Jun T, **Huang KL**. Genomic and molecular features distinguish young adult cancer from later-onset cancer. *Cell Rep.* 2021 **[Covered by Mount Sinai & 7 other news outlets]**
2. Qing T, Wang X, Jun T, Ding L, Pusztai L#, **Huang KL**#. Genomic determinants of homologous recombination deficiency across human cancers. *Cancers* 2021
3. Elmas A, Tharakan S, Jaladanki S, Galsky M, Liu T, **Huang KL**. Pan-cancer Proteogenomic Investigations Identify Post-Transcriptional Kinase Targets. *Communications Biology* 2021
4. Wang Z, Fan X, Shen Y, Pagadala MS, Signer R, Cygan KJ, Fairbrother WG, Carter H, Chung WK#, **Huang KL**#. Non-cancer-related pathogenic germline variants and expression consequences in ten-thousand cancer genomes. *Genome Med.* 2021

5. Carrot-Zhang J, Han S, Zhou W, Damrauer JS, Kemal A; **Cancer Genome Atlas Analysis Network**^o, Cherniack AD, Beroukchim R. Analytical protocol to identify local ancestry-associated molecular features in cancer. *STAR Protoc.* 2021
6. Zhang J, Jun T, Frank J, Nirenberg S, Kovatch P, **Huang KL**. Prediction of individual COVID-19 diagnosis using baseline demographics and lab data. *Scientific Reports* 2021
7. Jun T, Nirenberg S, Weinberger T, Sharma N, Pujadas E, Cordon-Cardo C, Kovatch P, **Huang KL**. Analysis of sex-specific risk factors and clinical outcomes in COVID-19. *Communications Medicine* 2021 [**Covered by Mount Sinai Today & 23 other news outlets**]
8. Capellini A, Williams M, Onel K[#], **Huang KL**[#]. The Functional Hallmarks of Cancer Predisposition Genes. *Cancer Manag Res.* 2021
9. Jaladanki SK^{*}, Elmas A^{*}, Malave GS, **Huang KL**. Genetic dependency of Alzheimer's disease-associated genes across cells and tissue types. *Sci Rep.* 2021 [**Covered by AlzForum**]
10. Moon C, Schilder BM, Raj T, **Huang KL**. Phenome- and Transcriptome-wide Associations of COVID-19 Genetic Risk Loci. *iScience* 2021
11. Qing T, Jun T, Lindblad KE, Lujambio A, Pusztai L[#], **Huang KL**[#]. Diverse Immune Response of DNA Damage Repair-Deficient Tumors. *Cell Reports Medicine* 2021
12. **Huang KL**[#], Scott AD, Weerasinghe A, Liu R, Zhou DC, Wang LB, Sengupta S, Lai CW, Wu Y, Ruggles K, Payne SH, Raphael B, Fenyő D, Chen K, Mills G, Ding L[#]. Systematic discovery of spatially interacting phosphorylation sites and mutations in cancer. *Nat Commun.* 2021
13. Dong G, Wendl M, Zhang B, Ding L, **Huang KL**. AeQTL: eQTL analysis using region-based aggregation of rare variants. *Pac Symp Biocomput.* 2021
14. Roudko V, Bozkus CC, Orfanelli T, McClain CB, Carr C, O'Donnell T, Chakraborty L, Samstein R, **Huang KL**, Blank SV, Greenbaum B, Bhardwaj N. Shared Immunogenic Poly-Epitope Frameshift Mutations in Microsatellite Unstable Tumors. *Cell.* 2020
15. Zhang Q, Sidorenko J, Couvy-Duchesne B, Marioni RE, Wright MJ, Goate AM, Marcora E, **Huang KL**, Porter T, Laws SM; Australian Imaging Biomarkers and Lifestyle (AIBL) Study, Sachdev PS, Mather KA, Armstrong NJ, Thalamuthu A, Brodaty H, Yengo L, Yang J, Wray NR, McRae AF, Visscher PM. Risk prediction of late-onset Alzheimer's disease implies an oligogenic architecture. *Nat Commun.* 2020
16. Bailey MH, Meyerson WU, Dursi LJ, Wang LB, Dong G, Liang WW, Weerasinghe A, Li S, Kelso S; MC3 Working Group; PCAWG novel somatic mutation calling methods working group, Saksena G, Ellrott K, Wendl MC, Wheeler DA, Getz G, Simpson JT, Gerstein MB, Ding L; **PCAWG Consortium**^o. Retrospective evaluation of whole exome and genome mutation calls in 746 cancer samples. *Nat Commun.* 2020
17. Li CH, Prokopec SD, Sun RX, Yousif F, Schmitz N, Boutros PC; **PCAWG Consortium**^o. Sex differences in oncogenic mutational processes. *Nat Commun.* 2020
18. Molina-Sánchez P, Ruiz de Galarreta M, Yao MA, Lindblad KE, Bresnahan E, Bitterman E, Martin TC, Rubenstein T, Nie K, Golas J, Choudhary S, Bárcena-Varela M, Elmas A, Miguela V, Ding Y, Kan Z, Grinspan LT, **Huang KL**, Parsons RE, Shields DJ, Rollins RA, Lujambio A. Cooperation between distinct cancer driver genes underlies inter-tumor heterogeneity in hepatocellular carcinoma. *Gastroenterology.* 2020
19. Oak N, Cherniack AD, Mashl RJ; TCGA Analysis Network, Hirsch FR, Ding L, Beroukchim R, Gümüş ZH, Plon SE, **Huang KL**. Ancestry-Specific Predisposing Germline Variants in Cancer. *Genome Medicine* 2020
20. Batra P, **Huang KL**. A Genotype Concordance Assessment between Consumer Genetic Testing Services. *Annals of Human Genetics* 2020
21. Carrot-Zhang J^{*}, Chambwe N^{*}, Damrauer JS^{*}, Knijnenburg TA^{*}, Robertson AG^{*}, Yau C^{*}, Zhou W^{*}, Berger AC^{*}, **Huang KL**^{*}, Newberg JY^{*}, Mashl RJ, Romanel A, Sayaman RW, Demichelis F, Felau I, Frampton GM, Han S, Hoadley KA, Kemal A, Laird PW, Lazar AJ, Le X, Oak N, Shen H, Wong CK, Zenklusen JC, Ziv E; Cancer Genome Atlas Analysis Network, Cherniack AD, Beroukchim R. Comprehensive Analysis of Genetic Ancestry and Its Molecular Correlates in Cancer. *Cancer Cell* 2020 [**Covered by 7 news outlets**]
22. **ICGC/TCGA Pan-Cancer Analysis of Whole Genomes Consortium**^o. Pan-cancer analysis of whole genomes. *Nature* 2020 [**Covered by 44 news outlets**]
23. **Huang KL**[#], Wu Y, McMichael JF, Scott AD, Cao S, Wendl MC, Johnson KJ, Ruggles K, Held J, Payne SH, Davies S, Ellis MJ, Fenyő D, Chen F, Townsend RR, Carr SA, Ding L[#]. Regulated phosphosignaling associated with breast cancer subtypes and druggability. *Molecular and Cellular Proteomics* 2019
24. DeRossi C, Bambino K, Morrison J, Sakarin I, Villacorta-Martin C, Zhang C, Ellis JL, Fiel MI, Ybanez M, Lee YA, **Huang KL**, Yin C, Sakaguchi TF, Friedman SL, Villanueva A, Chu J. Mannose Phosphate Isomerase and Mannose Regulate Hepatic Stellate Cell Activation and Fibrosis in Zebrafish and Humans. *Hepatology* 2019
25. Adamovich AI, Banerjee T, Wingo M, Duncan K, Ning J, Martins Rodrigues F, **Huang KL**, Lee C, Chen F, Ding L, Parvin JD. Functional analysis of BARD1 missense variants in homology-directed repair and damage sensitivity. *PLoS Genetics* 2019
26. Oak N, Ghosh R, **Huang KL**, Wheeler DA, Ding L, Plon SE. Framework for microRNA variant annotation and prioritization using human population and disease datasets. *Human Mutation* 2019 [**Covered by 7 news outlets**]

27. Scott AD, **Huang KL**, Weerasinghe A, Mashl RJ, Gao Q, Ding L. CharGer: Clinical Characterization of Germline Variants. *Bioinformatics* 2018 [Covered by 1 news outlet]
28. Sengupta S*, Sun SQ*, **Huang KL**, Oh C, Bailey MH, Varghese R, Wyczalkowski MA, Ning J, Tripathi P, McMichael JF, Johnson KJ, Kandoth C, Welch J, Ma C, Wendl MC, Payne SH, Fenyo D, Townsend RR, Dipersio JF, Chen F, Ding L. Integrative Omics Analyses Broadens Treatment Targets in Human Cancer. *Genome Medicine* 2018
29. **Huang KL**, Mashl RJ, Wu Y, Ritter DI, Wang J, Oh C, Paczkowska M, Reynolds S, Wyczalkowski MA, Oak N, Scott AD, Krassowski M, Cherniack AD, Houlahan KE, Jayasinghe R, Cao S, Kim YW, Koire A, McMichael JF, Huchtagowder V, Hahn A, McLellan MD, Al-Mulla F, Johnson KJ, TCGA Research Network, Boutros PC, Raphael B, Lazar AJ, Zhang W, Wendl MC, Govindan R, Jain S, Kulkarni S, Dipersio JF, Reiman J, Meric-Bernstam F, Chen K, Shmulevich I, Plon S, Chen F#, Ding L#. Pathogenic germline variants in 10,389 adult cancers. *Cell* 2018 [Covered by 28 news outlets]
30. Ding L*, Bailey MH*, Porta-Pardo E*, Thorsson V, Colaprico A, Bertrand D, Gibbs DL, Weerasinghe A, **Huang KL**, Tokheim C, Cortés-Ciriano I, Jayasinghe R, Chen F, Yu L, Sun S, Olsen C, Kim J, Taylor AM, Cherniack AD, Akbani R, Suphavitai C, Nagarajan N, Stuart JM, Mills GB, Wyczalkowski MA, Vincent BG, Hutter CM, Zenklusen JC, Hoadley KA, Wendl MC, Shmulevich I, Lazar AJ, Wheeler DA, Getz G, TCGA Research Network. Perspective on Oncogenic Processes at the End of the Beginning of Cancer Genomics. *Cell* 2018 [Covered by 21 news outlets]
31. Cao Y, Zhou W, Li L, Wang J, Gao Z, Jiang Y, Jiang X, Shan A, Bailey MH, **Huang KL**, Sun SQ, McLellan MD, Niu B, Wang W, Ding L, Ning G. Pan-cancer analysis of somatic mutations across 21 neuroendocrine tumor types. *Cell Research* 2018
32. Mundt F, Rajput S, Li S, Ruggles KV, Mooradian AD, Mertins P, Gillette MA, Krug K, Guo Z, Hoog J, Erdmann-Gilmore P, Primeau T, Huang S, Edwards DP, Wang X, Wang X, Kawaler E, Mani DR, Clauser KR, Gao F, Luo J, Davies SR, Johnson GL, **Huang KL**, Yoon CJ, Ding L, Fenyo D, Ellis MJ, Townsend RR, Held JM, Carr SA, Ma CX. Mass spectrometry-based proteomics reveals potential roles of NEK9 and MAP2K4 in resistance to PI3K inhibitors in triple negative breast cancers. *Cancer Research* 2018
33. Wang X, Mooradian AD, Erdmann-Gilmore P, Zhang Q, Viner R, Davies SR, **Huang KL**, Bomgarden R, Van Tine BA, Shao J, Ding L, Li S, Ellis MJ, Rogers JC, Townsend RR, Fenyo D, Held JM. Breast tumors educate the proteome of stromal tissue in an individualized but coordinated manner. *Science Signaling* 2017
34. **Huang KL***, Marcora E*, Pimenova AA, Di Narzo AF, Kapoor M, Jin SC, Harari O, Bertelsen S, Fairfax BP, Czajkowski J, Chouraki V, Grenier-Boley B, Bellenguez C, Deming Y, McKenzie A, Raj T, Renton AE, Budde J, Smith A, Fitzpatrick A, Bis JC, DeStefano A, Adams HHH, Ikram MA, van der Lee S, Del-Aguila JL, Fernandez MV, Ibanez L, International Genomics of Alzheimer's P, Alzheimer's Disease Neuroimaging I, Sims R, Escott-Price V, Mayeux R, Haines JL, Farrer LA, Pericak-Vance MA, Lambert JC, van Duijn C, Launer L, Seshadri S, Williams J, Amouyel P, Schellenberg GD, Zhang B, Borecki I, Kauwe JSK, Cruchaga C, Hao K, Goate AM. A common haplotype lowers PU.1 expression in myeloid cells and delays onset of Alzheimer's disease. *Nature Neuroscience* 2017 [Covered by 10 news outlets]
35. Mashl RJ, Scott AD, **Huang KL**, Wyczalkowski MA, Yoon CJ, Niu B, DeNardo E, Yellapantula VD, Handsaker RE, Chen K, Koboldt DC, Ye K, Fenyo D, Raphael BJ, Wendl MC, Ding L. GenomeVIP: a cloud platform for genomic variant discovery and interpretation. *Genome Research* 2017
36. **Huang KL***, Li S*, Mertins P*, Cao S, Gunawardena HP, Ruggles KV, Mani DR, Clauser KR, Tanioka M, Usary J, Kavuri SM, Xie L, Yoon C, Qiao JW, Wrobel J, Wyczalkowski MA, Erdmann-Gilmore P, Snider JE, Hoog J, Singh P, Niu B, Guo Z, Sun SQ, Sanati S, Kawaler E, Wang X, Scott A, Ye K, McLellan MD, Wendl MC, Malovannaya A, Held JM, Gillette MA, Fenyo D, Kinsinger CR, Mesri M, Rodriguez H, Davies SR, Perou CM, Ma C, Reid Townsend R, Chen X, Carr SA#, Ellis MJ#, Ding L#. Proteogenomic integration reveals therapeutic targets in breast cancer xenografts. *Nature Communications* 2017 [Covered by 8 news outlets]
37. Deming Y, Li Z, Kapoor M, Harari O, Del-Aguila JL, Black K, Carrell D, Cai Y, Fernandez MV, Budde J, Ma S, Saef B, Howells B, **Huang KL**, Bertelsen S, Fagan AM, Holtzman DM, Morris JC, Kim S, Saykin AJ, De Jager PL, Albert M, Moghekar A, O'Brien R, Riemenschneider M, Petersen RC, Blennow K, Zetterberg H, Minthon L, Van Deerlin VM, Lee VM, Shaw LM, Trojanowski JQ, Schellenberg G, Haines JL, Mayeux R, Pericak-Vance MA, Farrer LA, Peskind ER, Li G, Di Narzo AF, Alzheimer's Disease Neuroimaging I, Alzheimer Disease Genetic C, Kauwe JS, Goate AM, Cruchaga C. Genome-wide association study identifies four novel loci associated with Alzheimer's endophenotypes and disease modifiers. *Acta Neuropathologica* 2017
38. Deming Y, Black K, Carrell D, Cai Y, Del-Aguila JL, Fernandez MV, Budde J, Ma S, Saef B, Howells B, Bertelsen S, **Huang KL**, Sutphen CL, Tarawneh R, Fagan AM, Holtzman DM, Morris JC, Goate AM, Dougherty JD, Cruchaga C. Chitinase-3-like 1 protein (CHI3L1) locus influences cerebrospinal fluid levels of YKL-40. *BMC Neurology* 2016
39. Mertins P*, Mani DR*, Ruggles KV*, Gillette MA*, Clauser KR, Wang P, Wang X, Qiao JW, Cao S, Petralia F, Kawaler E, Mundt F, Krug K, Tu Z, Lei JT, Gatz ML, Wilkerson M, Perou CM, Yellapantula V, **Huang KL**, Lin C, McLellan MD, Yan P, Davies SR, Townsend RR, Skates SJ, Wang J, Zhang B, Kinsinger CR, Mesri M, Rodriguez H, Ding L, Paulovich AG, Fenyo D, Ellis MJ#, Carr SA#. Proteogenomics connects somatic mutations to signalling in breast cancer. *Nature* 2016 [Covered by 4 news outlets]
40. Ye K, Wang J, Jayasinghe R, Lameijer EW, McMichael JF, Ning J, McLellan MD, Xie M, Cao S, Yellapantula V, **Huang KL**, Scott A, Foltz S, Niu B, Johnson KJ, Moed M, Slagboom PE, Chen F, Wendl MC, Ding L. Systematic discovery of complex insertions and deletions in human cancers. *Nature Medicine* 2016 [Covered by 9 news outlets]
41. Li J*, **Huang KL***, Zhang T, Li H, Zhao J, Wang H. Pan-cancer methylation and expression profiling of adenocarcinomas revealed epigenetic silencing in the WNT signaling pathway. *Neoplasia* 2016

42. Lu C*, Xie M*, Wendl MC*, Wang J*, McLellan MD*, Leiserson MDM*, **Huang KL**, Wyczalkowski Ma, Jayasinghe R, Banerjee T, Ning J, Tripathi P, Zhang Q, Niu B, Ye K, Schmidt HK, Fulton RS, McMichael JF, Batra P, Kandoth C, Bharadwaj M, Koboldt DC, Miller Ca, Kanchi KL, Eldred JM, Larson DE, Welch JS, You M, Ozenberger Ba, Govindan R, Walter MJ, Ellis MJ, Mardis ER, Graubert Ta, Dipersio JF, Ley TJ, Wilson RK, Goodfellow PJ, Raphael BJ, Chen F, Johnson KJ, Parvin JD, Ding L. Patterns and functional implications of rare germline variants across 12 cancer types. *Nature Communications* 2015 [**Covered by 17 news outlets**]
43. Ringel AE, Ryznar R, Picariello H, **Huang KL**, Lazarus AG, Holmes SG. Yeast Tdh3 (glyceraldehyde 3-phosphate dehydrogenase) is a Sir2-interacting factor that regulates transcriptional silencing and rDNA recombination. *PLoS Genetics* 2013

Non-Research Article Publications [Format]:

1. **Huang KL**. Solve It Yourself: Fix the World's Problem with Science. [E-book, Paperback, Hardcover] **Impact: Amazon #1 best-seller in Civics, #2 in motivational self-help in 2021/04. Author interviews on Podcast, Radio, and TV shows.**
2. **Huang KL**. Ten Simple Rules for landing on the right job after your PhD or postdoc. *PLoS Computational Biology* 2020. [PLoS ten simple rules series] **Impact: 8,000+ reads within only the first year of publication.**
3. **Huang KL**. Most popular public searches on gene names. *Nature* 2018. [Correspondence]

RESEARCH FUNDING SUPPORT

Ongoing Support (Pending grants not included)

R35 GM138113 (Huang-PI) 09/15/2020-07/31/2025 6.12 CM
NIH Role: PI TC: \$1,247,990

Integrative Approaches for Identifying Causal Gene-Cell Type Pairs of Complex Disease

The goal of this project is to develop innovative methods to identify disease-associated gene-cell pairs by integrating large-scale molecular data of patient and cell cohorts.

R01 NS116006 (Raj – PI) 04/01/2021-03/31/2026 0.84 CM
NIH Role: Co-Investigator. TC: \$4,187,836

The Role of Myeloid Cells in Parkinson's Disease

The goal of this project is to deepen our understanding of the role of peripheral monocytes and microglia in Parkinson's Disease (PD) and to identify myeloid-related targets for treatment of the disease.

R01 AG072300 (Castellano – PI) 05/01/2021-04/31/2026 0.6 CM
NIH Role: Co-Investigator

Mechanisms of TIMP2-mediated hippocampal revitalization in Alzheimer's disease

The goal of this project is to investigate how TIMP2 may mediate neuronal phenotypes in Alzheimer's disease and establish its modulation as a potential treatment strategy.

Completed Support

Google Cloud Pilot Grant ([Google](#)) 4/1/2020 - 10/1/2020
A Web-based Simulator for Pandemic Containment Strategies (Huang)
Role: PI

MSSM GGS Pilot Grant ([Mount Sinai](#)) 10/1/2019 - 10/1/2020
A Novel Epigenetic Mark in Alzheimer Disease and Aging (Gang)
Role: Co-I

INVITED TALKS

1. Hosted 7 OpenBoxScience.Org open symposiums and presented on 2 of them.
2. Drug Discovery News (DDN) Webinar, USA, 2021.
3. Perlmutter Cancer Center Research Seminar Series, NYU Langone Health, New York, USA, 2021.
4. The Lloyd Sherman Scholars program, Center for Excellence in Youth Education (CEYE), New York, USA, 2021.
5. TCI Big Data Cancer Retreat, Icahn School of Medicine at Mount Sinai, New York, USA, 2021.
6. Sage Bionetwork, Seattle, Washington State, USA, 2021.
7. National Taiwan University Hospital (NTUH), Taipei, Taiwan, 2021.
8. National Central University, Taiwan, Taoyuan, Taiwan, 2021.
9. National Health Research Institutes (NHRI), Miaoli, Taiwan, 2021.
10. The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, Ghent, Belgium (virtual), 2020. [[Keynote](#)]
11. NGS teleconference, Kaohsiung Medical University, Kaohsiung, Taiwan (virtual), 2020. [[Keynote](#)]
12. Academia Sinica, Institute of Statistical Science, Taipei, Taiwan, 2020.

13. National Yang-Ming University, Institute of Biomedical Informatics, Taipei, Taiwan, 2020.
14. National Tsing Hua University, Institute of Biomedical Engineering, Hsinchu, Taiwan, 2020.
15. National Yang-Ming University, School of Dentistry, Taipei, Taiwan, 2020.
16. Icahn School of Medicine at Mount Sinai, Department of Genetics and Genomic Sciences, New York, USA, 2019.
17. Wesleyan University, Department of Molecular Biology and Biochemistry, Middletown, USA, 2019.
18. Icahn School of Medicine at Mount Sinai, Center for Transformative Disease Modeling, New York, USA, 2018.
19. The Scripps Research Institute, Skaggs Institute for Molecular Biology, San Diego, USA, 2018.
20. UT Southwestern, Department of Bioinformatics, Dallas, USA, 2018.
21. Oregon Health and Science University, The Knight Cancer Institute, Portland, USA, 2018.
22. UCLA Institute for Quantitative and Computational Biosciences, Los Angeles, USA, 2018.
23. Novartis Institutes for Biomedical Research, Cambridge, USA, 2018.
24. Calico Life Sciences, South San Francisco, USA, 2017.
25. 23andMe, Mountain View, USA, 2017.
26. NCI CPTAC Steering Committee Meeting, Bethesda, USA, 2017.
27. Academia Sinica, IBMS Seminar, Taipei, Taiwan, 2017.
28. PanCanAtlas Face-to-face Meeting, Houston, USA, 2016.
29. Alzheimer's Association International Conference (AAIC), Toronto, Canada, 2016.
30. American Association for Cancer Research Annual Meeting (AACR), New Orleans, USA, 2016.
31. NCI CPTAC Meeting, Bethesda, USA, 2015.

EDITORIAL AND PEER-REVIEW SERVICE [*Multiple times]

Grant Proposals:

Peer-reviewer: 2020 Arizona Alzheimer's Disease Core Center Grant / Wellcome Trust International Fellowships

Research Manuscripts:

Guest Associate Editor: Frontiers in Aging Neuroscience (Topic: Advancing Clinical Neuroscience by Multi-Omic Driven Approaches Towards Personalized Medicine: Opportunity, Challenges, and the Future)

Peer-reviewer: Bioinformatics* / BMC Bioinformatics / BMC Genomics / BMC Neurology / BMJ Medicine / Cell Reports Medicine / Clinical Proteomics / Communications Medicine / EMBO Molecular Medicine / / Frontiers in Genetics / Genome Medicine* / iScience / Molecular and Cellular Proteomics / Nature Communications* / npj Digital Medicine

TRAINEES

Name	Level of Trainee	Role in Training [Date]	Training Venue	Trainee's Immediate Outcome
Yuqi Liu	Undergraduate student	Research mentor for volunteer projects [2021-]	ISMMS (trainee at NYU)	
Luo Song	MD student	Research mentor for volunteer projects [2021-]	ISMMS	
Michael Wang	PhD student	Research mentor for visiting scholar [2019-]	ISMMS (trainee at PUMC)	
Tzipora Weinberger	MS student	MS mentor [2020-]	ISMMS	
Rikhiya Ghosh	Postdoc	Postdoc mentor [2021-]	ISMMS	
Chang Moon	MD/PhD student	Research mentor for volunteer projects [2021]	ISMMS	Continuing MD/PhD at ISMMS
Jimmy Zhang	High school student	Research mentor [2019-2021]	ISMMS (trainee at Queens High School for the Sciences)	Undergraduate, Columbia University
Tomi Jun, MD	Hem/onc Fellow	Research mentor [2019-2021]	ISMMS	Medical Director, SEMA4
Zishan Wang, PhD	Postdoc	Postdoc mentor [2019-]	ISMMS	
Jing Wang, PhD	Postdoc	Postdoc mentor [2019]	ISMMS	Data Scientist, Amazon
Abdulkadir Elmas, PhD	Postdoc	Postdoc mentor [2019-]	ISMMS	
Suraj Jaladanki	MD student	Research mentor for volunteer projects [2019-2020]	ISMMS	Continuing MD at ISMMS
William Lee, BS	MS student	MS mentor [2019-2020]	ISMMS	Bioinformatician, ISMMS
Tao Qing, PhD	Postdoc	Advised on collaborative projects with Dr. Lajos Pustzai [2019-]	ISMMS (trainee at Yale)	
Katherine Houlahan, PhD	PhD student	Advised on collaborative projects with Dr. Paul Boutros [2019-]	ISMMS (trainee at UCLA)	Postdoc, Stanford

Guanlan Dong, BS	Undergraduate student	Research mentor for volunteer projects [2019-2020]	ISMMS (trainee at WashU)	Harvard B.I.G. PhD program
Prag Batra, BS	MD student	Research mentor for volunteer projects [2018-2020]	ISMMS (trainee at NYU)	Founding Engineer, Bunkerhill Health
Ninad Oak, PhD	PhD student	Advised on collaborative projects with Dr. Sharon Plon [2018-2020]	ISMMS (trainee at Baylor)	Scientist, St. Jude Children's Hospital

PhD Dissertation Committee Member:

Aanay Shah (Clinical and Translational Research)/**Julia Zhao** (Genetics and Genomic Sciences)/**Miriam Saffern** (Immunology)

Mentoring for PhD Rotation Students:

Rebecca Signer (Genetics and Genomic Sciences, 2021)/**Miriam Saffern** (Immunology, 2020)

Mentoring for Medical Students (mostly second semester of M1 ~ first semester of M2):

Serena Tharakan (2019-2020), **Alexandra Capellini** (2019-2020), **Matthew Williams** (2019-2020), **Daniel Fulop** (2019-2021), **Makda Zewde** (2020-2021), **Suraj Jaladanki** (2019-2021), **Gabriel Santos Malave** (2020-2021), **Chang Moon** (2020-2021)

LEADERSHIP EXPERIENCE AND EDUCATIONAL SERVICE

1. **Co-lead, GGS Departmental Cancer Genomics WIP**, Icahn School of Medicine at Mount Sinai 2021-Present
2. **Member, GGS Faculty Engagement Committee**, Icahn School of Medicine at Mount Sinai 2021-Present
3. **Member, GGS Faculty Mentorship Committee**, Icahn School of Medicine at Mount Sinai 2021-Present
4. **Co-lead, TDM Center Seminar Series**, Icahn School of Medicine at Mount Sinai 2020-Present
5. **Member, Postdoc Advisory Committee**, Icahn School of Medicine at Mount Sinai 2020-Present
6. **Co-Founder**, DeepGene LLC 2016-2017
7. **Teaching Assistant and Guest Lecturer**, Washington University in St. Louis & Wesleyan University 2011-2018
8. **Community Health Project Founder and Leader**, Matibabu Foundation, Kenya 2013
9. **English Instructor** for compulsory substitute military service, Zhuwei Elementary School, Taiwan 2012-2013

AWARDS

1. **NIGMS Maximizing Investigators' Research Award (MIRA) for ESI** 2020-2025
2. **Alzheimer's Association International Conference (AAIC) Travel Fellowship** 2016
3. **First Place Winner, Skandalaris Healthcare Hackathon** 2015
4. **Taiwanese Ministry of Education Ph.D. Scholarship** 2014-2015
5. **Honors (Studio Art) & High Honors (Molecular Biology) Dissertations, Wesleyan University** 2012
The only person in the 2012 class to receive two *honors* designation
6. **Scott Biomedical Prize, Wesleyan University** 2012
Awarded to one graduating senior showing strong promise in biomedical research
7. **Howard Hughes Undergraduate Research Scholarship (awarded two terms)** 2010, 2011
8. **Freeman Asian Full-Ride Scholarship for Wesleyan University, CT** 2008-2012
Merit-based full scholarship awarded to one or two Taiwanese students per class year
9. **Math and Science Gifted Program at Chien-Kuo Senior High, Taiwan** 2005-2008
Admitted to the most competitive academic program (60 students/yr) in the lowest-acceptance-rate high school in Taiwan