CURRICULUM VITAE

August 11, 2024

YUNRO CHUNG

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EDUCATION & TRAINING

2016-2018	Postdoctoral Fellow, Fred Hutchison Cancer Center, Seattle, WA
2016	Ph.D., Biostatistics, University of North Carolina at Chapel Hill, Chapel Hill, NC
2008	M.S., Statistics, Chung-Ang University, Seoul, South Korea
2006	B.S., Statistics, Chung-Ang University, Seoul, South Korea

PROFESSIONAL EXPERIENCE

2018-Present	Assistant Professor, College of Health Solutions, Arizona State University (ASU),	
	Phoenix, AZ	
2018-Present	Faculty Member, Center for Personalized Diagnostics (CPD), Biodesign Institute, ASU,	
	Tempe, AZ	

PREVIOUS PROFESSIONAL EXPERIENCE

2015 Summer	Statistical Fellow, Statistical Software Development Division, SAS Institute, Cary, NC	
2012 Summer	Intern, Oncology Business Unit, Novartis, Florham Park, NJ	
2009-2016	Graduate Research Assistant, University of North Carolina at Chapel Hill, Chapel Hill,	
	NC	
2008-2009	Biostatistician, Korea Food and Drug Administration, Seoul, South Korea	

AWARDS & HONORS

2023	Faculty Research Award, College of Health Solutions, ASU	
2015	Marci K. Campbell Dissertation Award, Lineberger Comprehensive Cancer Center,	
	University of North Carolina at Chapel Hill, Chapel Hill, NC	
2014	Young Research Travel Award, International Conference on Advances in	
	Interdisciplinary Statistics and Combinatorics, Greensboro, NC	
2013-2016	Oak Ridge Institute for Science and Education (ORISE) Fellowship for PhD Dissertation	
	Research, US Food and Drug Administration	

PUBLICATIONS

Peer-reviewed Publications (Methodological Part):

- 1. §Zhang, Y. and **Chung, Y.**, 2024. Nonparametric estimation of linear personalized diagnostics rules via efficient grid algorithm, *Statistics in medicine*, 43(7), pp.1354-1371.
- 2. **Chung, Y.**, Ivanova, A. and Fine, J.P., 2024. Shape restricted additive hazards models: monotone, unimodal and u-shape hazard functions, *Statistics in medicine*, 43(9), pp.1671-1687.
- 3. **Chung, Y.,** 2024. Nonparametric estimation of proportional hazards with monotone baseline hazard and covariate effect, *Statistics in biosciences*. In press
- 4. Chen, D., **Chung, Y.**, and Beyene, K., 2024. Estimate time-to-infection (TTI) vaccination effect when TTI for unvaccinated group is unknown, *Statistics in biosciences*. In press

[§] denotes students under Chung's supervision.

5. Ahmadinejad, N., †**Chung, Y.**, †Li, L., 2023. J-score: a robust measure of clustering accuracy, *PeerJ Computer Science*, 9, e1545. († denotes co-corresponding authors)

6. **Chung, Y.**, Ivanova, A., Hudgens, M.G. and Fine, J.P., 2018. Partial likelihood estimation of isotonic proportional hazards models. *Biometrika*, 105(1), pp.133-148.

Peer-reviewed Publications (Collaborative Part):

- 7. Koehler, M.A., Song, L., Grill, F.J., Shubitz, L.F., Powell, D.A., Galgiani, J.N., Orbach, M.J., Robb, E.J., **Chung, Y.**, Williams, S.A. and Murugan, V., 2024. Discovery of a unique set of dog-seroreactive coccidioides proteins using nucleic acid programmable protein array. *Journal of Fungi*, *10*(5), p.307.
- 8. Song, L., Rauf, F., Hou, C.W., Qiu, J., Murugan, V., **Chung, Y.**, Lai, H., Adam, D., Magee, D.M., Trivino Soto, G. and Peterson, M., 2024. Quantitative assessment of multiple pathogen exposure and immune dynamics at scale. *Microbiology Spectrum*, *12*(1), pp.e02399-23.
- 9. Grill, F.J., Svarovsky, S., Gonzalez-Moa, M., Kaleta, E., Blair, J.E., Lovato, L., Grant, R., Ross, K., Linnehan, B.K., Meegan, J., Reilly, K.S., Brown A., Williams S., **Chung Y.**, Magee D.M., Grys T.E., Lake D.F., 2023, Development of a rapid lateral flow assay for detection of anti-coccidioidal antibodies. *Journal of Clinical Microbiology*, *61*(9), pp.e00631-23
- 10. Jehanathan, N., Kapuruge, E.P., Rogers, S.P., Williams, S., Chung, Y. and Borges, C.R., 2023. Oxidized LDL is stable in human serum under extended thawed-state conditions ranging from -20° C to room temperature. *Journal of Mass Spectrometry and Advances in the Clinical lab*, 27, pp.18-23.
- 11. Hou, C.W., Williams, S., Taylor, K., Boyle, V., Bobbett, B., Kouvetakis, J., Nguyen, K., McDonald, A., Harris, V., Nussle, B., Scharf, P., Jehn, M.L., Lant, T., Magee, M., **Chung, Y.**, LaBaer, J. and Murugan, V. 2023. Serological survey to estimate SARS-CoV-2 infection and antibody seroprevalence at a large public university: A cross-sectional study. *BMJ open*, *13*(8), 072627.
- 12. Lal, D., Song, L., Brar, T., Cope, E.K., Keim, P., Williams, S., **Chung, Y.**, Murugan, V., LaBaer, J. and Magee, D.M., 2023, Antibody responses to the host microbiome in chronic rhinosinusitis. In *International Forum of Allergy & Rhinology*, *13*(8), pp. 1503-1510.
- 13. Ruschel, V.C., Stolf, S.C., da Luz Baratieri, C., **Chung, Y.**, Boushell, L.W., Baratieri, L.N. and Walter, R., 2023. Five-year clinical evaluation of universal adhesives in noncarious cervical Lesions. *Operative Dentistry*, 48(4), pp.364-372.
- 14. Qiu, J., Engelbrektson, A., Song, L., Park, J.G., Murugan, V., Williams, S., **Chung, Y.**, Pompa-Mera, E.N., Sandoval-Ramirez, J.L., Mata-Marin, J.A. and Gaytan-Martinez, J., 2023. Comparative analysis of antimicrobial antibodies between mild and severe COVID-19. *Microbiology Spectrum*, *11*(4), pp.e0469022.
- 15. Sullivan, M., Huberty, J., **Chung, Y.** and Stecher, C., 2023. Mindfulness meditation app abandonment during the COVID-19 pandemic: an observational study. *Mindfulness*, *14*(6), pp.1506-1521.
- 16. Song, L., Song, M., Rabkin, C.S., **Chung, Y.**, Williams, S., Torres, J., Corvalan, A.H., Gonzalez, R., Bellolio, E., Shome, M. and LaBaer, J., 2023. Identification of anti-helicobacter pylori antibody signatures in gastric intestinal metaplasia. *Journal of Gastroenterology*, 58(2), pp.112-124.
- 17. Shome, M., Gao, W., Engelbrektson, A., Song, L., Williams, S., Murugan, V., Park, J.G., **Chung, Y.**, LaBaer, J. and Qiu, J., 2023. Comparative microbiomics analysis of antimicrobial antibody response between patients with lung cancer and control subjects with benign pulmonary nodules. *Cancer Epidemiology, Biomarkers & Prevention*, 32(4), pp.496-504.
- 18. Kapuruge, E.P., Jehanathan, N., Rogers, S.P., Williams, S., **Chung, Y.** and Borges, C.R., 2022. Tracking the Stability of Clinically Relevant Blood Plasma Proteins with delta-s-cys-albumin a

- dilute-and-shoot LC/MS-based marker of specimen exposure to thawed conditions. *Molecular & Cellular Proteomics*, 21(11), 100420.
- 19. Shome, M., Song, L., Williams, S., **Chung, Y.**, Murugan, V., Park, J.G., Faubion, W., Pasha, S.F., Leighton, J.A., LaBaer, J. and Qiu, J., 2022. Serological profiling of Crohn's disease and ulcerative colitis patients reveals anti-microbial antibody signatures. *World journal of gastroenterology*, 28(30), pp.4089-4101.
- 20. Shome, M., Chung, Y., Chavan, R., Park, J.G., Qiu, J. and LaBaer, J., 2022. Serum autoantibodyome reveals that healthy individuals share common autoantibodies. *Cell reports*, 39(9), 110873.
- 21. O'Kell, A.L., Shome, M., Qiu, J., Williams, S., **Chung, Y.**, LaBaer, J., Atkinson, M.A. and Wasserfall, C., 2022. Exploration of autoantibody responses in canine diabetes using protein arrays. *Scientific reports*, *12*, 2490.
- 22. Song, L., Song, M., Camargo, M.C., Van Duine, J., Williams, S., Chung, Y., Kim, K.M., Lissowska, J., Sivins, A., Gao, W. and Karthikeyan, K., 2021. Identification of anti-Epstein-Barr virus (EBV) antibody signature in EBV-associated gastric carcinoma. *Gastric Cancer*, 24(4), pp.858-867.
- 23. Park, D., Ro, M., Lee, A.J., Kwak, D.W., **Chung, Y.** and Kim, J.H., 2021. Contributory role of BLT2 in the production of proinflammatory cytokines in cecal ligation and puncture-induced sepsis. *Molecules and cells*, 44(12), pp.893-899.
- 24. Stecher, C., Berardi, V., Fowers, R., Christ, J., **Chung, Y.** and Huberty, J., 2021. Identifying app-based meditation habits and the associated mental health benefits: longitudinal observational study. *Journal of medical Internet research*, 23(11), p.e27282.
- 25. Song, L., Song, M., Rabkin, C.S., Williams, S., **Chung, Y.**, Van Duine, J., Liao, L.M., Karthikeyan, K., Gao, W., Park, J.G. and Tang, Y., 2021. Helicobacter pylori immunoproteomic profiles in gastric cancer. Journal of Proteome Research. *20*(1), 409-419
- 26. Lee, T., **Chung, Y.**, Poulton, C.J., Derebail, V.K., Hogan, S.L., Reich, H.N., Falk, R.J. and Nachman, P.H., 2020. Serum albumin at partial remission predicts outcomes in membranous nephropathy. *Kidney International Reports*, *5*(5), pp.706-717.
- 27. Davis, J.M., Ivanova, A., Chung, Y., Shaw, J.R., Rao, K.V., Ptachcinski, J.R., Sharf, A.A., Serody, J.S., Armistead, P.M., Wood, W.A. and Coghill, J.M., 2019. Evaluation of a test dose strategy for pharmacokinetically-guided busulfan dosing for hematopoietic stem cell transplantation. *Biology of Blood and Marrow Transplantation*, 25(2), pp.391-397.
- 28. Ruschel, V.C., Stolf, S.C., Shibata, S., **Chung, Y.**, Boushell, L.W., Baratieri, L.N. and Walter, R., 2019. Three-year clinical evaluation of universal adhesives in non-carious cervical lesions. *American Journal of Dentistry*, 32(5), pp.223-228.
- 29. Farias, D.C.S., Gonçalves, L.M., Walter, R., **Chung, Y.** and Blatz, M.B., 2019. Bond strengths of various resin cements to different ceramics. *Brazilian oral research*, *33*, e095.
- 30. Wang, C., Preisser, J., **Chung, Y.** and Li, K., 2018. Complementary and alternative medicine use among children with mental health issues: results from the National Health Interview Survey. *BMC complementary and alternative medicine*, 18(1), pp.1-17.
- 31. Ruschel, V.C., Shibata, S., Stolf, S.C., **Chung, Y.**, Baratieri, L.N., Heymann, H.O. and Walter, R., 2018. Eighteen-month clinical study of universal adhesives in noncarious cervical lesions. *Operative Dentistry*, *43*(3), pp.241-249.
- 32. Park, J., Jang, J.H., Park, G.S., **Chung, Y.**, You, H.J. and Kim, J.H., 2018. BLT2, a leukotriene B4 receptor 2, as a novel prognostic biomarker of triple-negative breast cancer. *BMB reports*, *51*(8), pp.373-377.
- 33. Bak, S.Y., Qi, X.S., Kelly, J.A., Alexander, S., **Chung, Y.**, Gyurdzhyan, S., Patton, L.L. and Lee, S.P., 2016. Dosimetric distribution to tooth-bearing areas in intensity-modulated radiation therapy for

- head and neck cancer: a pilot study. *Oral surgery, oral medicine, oral pathology and oral radiology, 121*(1), pp.43-48.
- 34. Lee, T., Derebail, V.K., Kshirsagar, A.V., **Chung, Y.**, Fine, J.P., Mahoney, S., Poulton, C.J., Lionaki, S., Hogan, S.L., Falk, R.J. and Cattran, D.C., 2016. Patients with primary membranous nephropathy are at high risk of cardiovascular events. *Kidney international*, 89(5), pp.1111-1118.
- 35. Ritter, A.V., Preisser, J.S., Puranik, C.P., **Chung, Y.**, Bader, J.D., Shugars, D.A., Makhija, S. and Vollmer, W.M., 2016. A predictive model for root caries incidence. *Caries research*, 50(3), pp.271-278.
- 36. Boushell, L.W., Heymann, H.O., Ritter, A.V., Sturdevant, J.R., Swift Jr, E.J., Wilder Jr, A.D., Chung, Y., Lambert, C.A. and Walter, R., 2016. Six-year clinical performance of etch-and-rinse and self-etch adhesives. *Dental Materials*, 32(9), pp.1065-1072.
- 37. Shea, T.C., Walko, C., **Chung, Y.**, Ivanova, A., Sheets, J., Rao, K., Gabriel, D., Comeau, T., Wood, W., Coghill, J. and Armistead, P., 2015. Phase I/II trial of dose-escalated busulfan delivered by prolonged continuous infusion in allogeneic transplant patients. *Biology of Blood and Marrow Transplantation*, 21(12), pp.2129-2135.
- 38. Walter, R., Boushell, L.W., Heymann, H.O., Ritter, A.V., Sturdevant, J.R., Wilder Jr, A.D., **Chung, Y.** and Swift Jr, E.J., 2014. Three-year clinical evaluation of a silorane composite resin. *Journal of esthetic and restorative dentistry*, 26(3), pp.179-190.
- 39. Lee, T., Gasim, A., Derebail, V.K., **Chung, Y.**, McGregor, J.G., Lionaki, S., Poulton, C.J., Hogan, S.L., Jennette, J.C., Falk, R.J. and Nachman, P.H., 2014. Predictors of treatment outcomes in ANCA-associated vasculitis with severe kidney failure. *Clinical journal of the American Society of Nephrology*, 9(5), pp.905-913.
- 40. Essick, G., Phillips, C., **Chung, Y.** and Trotman, C.A., 2013. Effects of lip revision surgery on long-term orosensory function in patients with cleft lip/palate. *The Cleft Palate-Craniofacial Journal*, 50(5), pp.507-512.
- 41. Walter, R., Feiring, A.E., Boushell, L.W., Braswell, K., Bartholomew, W., **Chung, Y.**, Phillips, C., Pereira, P.N. and Swift, E.J., 2013. One-year water sorption and solubility of "all-in-one" adhesives. *Brazilian Dental Journal*, 24(4), pp.344-348.
- 42. McFarland, T.B.H., Quinonez, R.B., Phillips, C., Lee, J. and **Chung, Y.**, 2013. Provision of preventive oral health services to infants and toddlers: North Carolina general dentists' readiness. *Journal of Oral Health & Community Dentistry*, 7(3), pp.140-147.
- 43. Ritter, A.V., Preisser, J.S., **Chung, Y.**, Bader, J.D., Shugars, D.A., Amaechi, B.T., Makhija, S.K., Funkhouser, K.A., Vollmer, W.M. and X-ACT Collaborative Research Group, 2012. Risk indicators for the presence and extent of root caries among caries-active adults enrolled in the Xylitol for Adult Caries Trial (X-ACT). *Clinical oral investigations*, *16*(6), pp.1647-1657.
- 44. Walter, R., Swift Jr, E.J., Nagaoka, H., **Chung, Y.**, Bartholomew, W., Braswell, K.M. and Pereira, P.N., 2012. Two-year bond strengths of "all-in-one" adhesives to dentine. *Journal of dentistry*, 40(7), pp.549-555.
- 45. Phillips, C., Essick, G.K., **Chung, Y.** and Blakey, G., 2012. Non-invasive therapy for altered facial sensation following orthognathic surgery: an exploratory randomized clinical trial of intranasal vitamin B12 spray. *Journal of maxillofacial trauma*, *1*(1), p.20-29.

Published Book Chapters:

- 1. **Chung, Y.,** 2021. Statistical Methods for Analysis of Protein Microarray Data Using R. *Protein Microarrays for Disease Analysis: Methods and Protocols*, pp.269-279.
- 2. Zink, R.C., Koch, G.G., **Chung, Y.** and Wiener, L.E., 2017. Advanced Randomization-Based Methods. *Analysis of Clinical Trials Using SAS: A Practical Guide*, pp.67-86.

GRANT FUNDING

Dollar amount is total obligated for award period listed. If funding is for a subcontract, dollar amount is for the subcontract only, not the entire project.

Active:

- 21X089 (PI: LaBaer), Leidos (Prime: National Cancer Institute), Multiplexed in-solution serological test for SARS-CoV-2, human coronaviruses and other respiratory pathogens, \$14,922,843, Co-I, 15% effort, 10/2021-09/2025
- 2. U01 IP001180 (PI: Murugan), Centers for Disease Control and Prevention, Platform to Assess Influenza and COVID-19 Vaccine Effectiveness in Underserved Arizona Populations Components A & D, \$12,999,999, Co-I, 10% effort, 09/2022-09/2027
- 3. U01CA281660 (PI: Anderson), National Cancer Institute, Southwest EDRN clinical validation center for head and neck cancer, \$5,810,685, Co-I, 14% effort, 08/2023-07/2028
- 4. U2C CA271903 (PI: LaBaer), National Cancer Institute, High-throughput immunoproteomics for cancer biomarker discovery, \$5,517,516, Co-I, 11% effort, 09/2022-08/2027
- 5. R01 CA286128 (PI: Qiu), National Cancer Institute, Serum biomarkers to predict immune related adverse events and benefit from single agent pembrolizumab therapy in early stage triple negative breast cancer, \$3,950,448, Co-I, 20% effort, 12/2023-11/2028
- 6. 20887 (PI: Murugan), University of Maryland, Baltimore (Prime: Defense Advanced Research Projects Agency), Assessing immune memory, \$2,510,814, Co-I, 15% effort, 12/2022-05/2027
- 7. R01 AI55954 (PIs: Magee & Lake), National Institute of Allergy and Infectious Diseases, Serological biomarkers for coccidioidomycosis, \$1,518,970, Co-I, 10% effort, 06/2021-05/2025
- 8. 1R34 AA030489-01 (PI: Ogbonnaya), National Institute on Alcohol Abuse and Alcoholism, Improving HIV care engagement among Ugandan adolescent girls and young women through reductions in male partner alcohol use and intimate partner violence risk: the Kisoboka Mukwano intervention, \$662,079, Co-I, 10% effort, 09/2022-08/2025
- 9. RFGA2022-010-20 (PI: LaBaer), Arizona Biomedical Research Commission, Comprehensive genomic and immunological analysis to improve personalized management of Lynch syndrome, \$750,000, Co-I, 30% effort, 01/2023-01/2026
- 10. R21 CA250999 (PI: Borges), National Cancer Institute, Aliquot-level visual indicators of biospecimen exposure to thawed conditions, \$617,052, Co-I, 25% effort, 02/2022-01/2025
- 11. R21 CA26909 (PI: Borges), National Cancer Institute, Plate reader assays to forensically assess exposure of plasma and serum to thawed conditions, \$199,584, Collaborator, 10% effort, 06/2022-05/2025

Completed:

- 12. W911NF19C0039 (PI: LaBaer), Defense Advanced Research Projects Agency, Diagnostic epigenetics of infectious agents and chemical toxicity, \$4,539,173, Co-I, 5% effort, 07/2019-12/2020
- 13. U01 CA214201 (PI: LaBaer), National Cancer Institute, Novel approaches to study immune responses to post translational modifications for cancer detection, \$2,622,242, Co-I, 10% effort, 09/2021-08/2022
- 14. 2950007-01 (PI: LaBaer), Northern Arizona University (Prime: Arizona Board of Regents), Arizona universities collaborate on CoV-2 variant detection, monitoring, and impact, \$1,000,000, Co-I, 16% effort, 07/2021-12/2022

15. ARI-299909 (PI: LaBaer), Mayo Clinic, Tailoring perianal Crohn's Disease management through molecular fingerprinting: developing more personalized and effective therapeutic strategies, \$174,002, Co-I, 25% effort, 06/2022-06/2023

 ARI-303156 (PI: LaBaer), ASU-Mayo Clinic Seed Grant, Comprehensive genomic and immunological analysis to improve personalized management of Lynch syndrome, \$60,000, Co-I, 25% effort, 07/2022-06/2023

PRESENTATIONS

Invited:

- 1. Precision diagnostics for biomarker studies, Department of Epidemiology and Biostatistics, Mel and Enid Zuckerman College of Public Health, University of Arizona, Tucson, AZ, 04/2023
- 2. Estimation of disease progression rate using longitudinal surrogate outcomes in non-randomized validation subsample, Conference on Lifetime Data Science, Storrs, CT, 06/2017
- 3. Isotonic proportional hazards models with its application to clinical trial data, Center for Drug Evaluation Research, Food and Drug Administration, Silver Spring, DC, 01/2016
- 4. Order restricted inference in hazards regression models with application to clinical trial data, National Institute of Environmental Health Sciences, National Institutes of Health, Durham, NC, 10/2015

Contributed:

- 5. Estimation of linear personalized diagnostics rules, Eastern North American Region of the International Biometric Society, Baltimore, MD, 03/2024
- 6. Precision diagnostics for cancer biomarker research, Stat4Onc Annual Symposium, Knight Cancer Center, Oregon Health Science & University, Portland, OR, 05/2023
- 7. Order-restricted survival analysis with applications to optimal dose-finding in phase 1 oncology trials, Duke-Industry Statistics Symposium, Durham, NC, 03/2023
- 8. Evaluation of biomarkers for heterogeneous case-control studies, Joint Statistical Meetings, Seattle, WA, 08/2021
- 9. Personalized diagnostic rule for NAPPA, Arizona Wellbeing Commons Conference, Phoenix, AZ, 09/2019
- 10. A deep learning approach to gene interaction prediction, The Statistical and Applied Mathematical Sciences Institute, Durham, NC, 08/2019
- 11. Shape restricted additive hazards models, Eastern North American Region of the International Biometric Society, Washington, DC, 03/2017
- 12. Partial likelihood estimation of isotonic proportional hazards model, Eastern North American Region of the International Biometric Society, Miami, FL, 03/2015
- 13. Statistical challenges in investigating the effect of Busulfan delivered by targeted pharmacokinetics in Phase I oncology trial, International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Greensboro, NC, 10/2014

SOFTWARE DEVELOPED

Developed R packages available on the comprehensive R archive network (CRAN):

- 1. isoSurv: isotonic regression with survival data
- 2. aisoph: additive isotonic proportional hazards model
- 3. uniah: unimodal additive hazards model
- 4. varoc: value added receiver operating characteristics (ROC) curve
- 5. surrosurvROC: surrogate survival ROC
- 6. persDx: personalized diagnostics rules for subgroup identification and precision diagnostics

PATENTS

Filed though ASU SkySong:

1. **Chung, Y.** with Shome, M., Chavan, R., Park, J., Qiu, J. and LaBaer, J. Autoantibodies, kits, and methods of verifying diagnostic results, 05/2023

- 2. **Chung, Y.** with Chavan, R., LaBaer, J., Park, J., Qiu, J. and Shome, M. Autoantibodies for identification of false positives of disease and uses thereof, 05/2023
- 3. **Chung, Y.**, J., Qiu, J., Shome, M. and Song, L. Anti-microbial antibody signatures related to lung tumors and uses thereof, 08/2022
- 4. **Chung, Y.** with LaBaer, J., Leighton, J., Qiu, J., Shome, M., and Song, L. Anti-microbial antibody signatures of inflammatory bowel disease and uses thereof, 08/2022
- 5. Chung, Y. with LaBaer, J., Qiu, J. and Shome, M. Methods for diagnosing gastric intestinal metaplasia, 05/2022
- 6. **Chung, Y.** with LaBaer, J., Qiu, J. and Song, L. Novel biomarkers for Epstein-Barr Virus-associated gastric cancer detection, 10/2019
- 7. **Chung, Y.** with LaBaer, J., Qiu, J. and Song, L. Novel antibodies for detecting gastric cancer, 09/2019

TEACHING at ASU (unless stated otherwise)

Courses Taught	
2024 Fall	*BST 601: Biostatistical methods and inference
2022-2024 Spring	BMI 517: Advanced biostatistics for biomedical research and health care
2020-2023 Fall	BMI 515: Applied biostatistics in medicine and informatics
2019-2021 Spring	BMI 211: Modelling biomedical decisions
2019 Fall	HCD 300: Biostatistics

^{*} New courses developed.

Biostatistics Seminars

- 2022 Analysis of ASU's COVID-19 serological survey data, College of Health Solutions
- 2021 Practical statistics for graduate studies, Biodesign Institute
- 2020 Biomarker evaluation using receiver operating characteristics curve, Biodesign Institute
- 2019 Fundamental of biostatistics, Bioinformatics Core

Guest Lectures

- 2018 Survival analysis for BMI 461: Advanced Topics in Biomedical Informatics I
- 2012 Survival analysis for BIOS 600: Principles of statistical inference, University of North Carolina at Chapel Hill, NC

Teaching Assistant

2012 BIOS 600: Principles of statistical inference, University of North Carolina at Chapel Hill, NC

MENTORING

Chair, Dissertation or Thesis Committee

PhD:

- 1. Ryan Fowers, co-advised with Chad Stecher, Biomedical Informatics, "Objective measure of mobile meditation app habits", 2023 (First Job: Data Scientist, SelectHealth, Murray, Utah)
- 2. Yaliang Zhang, co-advised with Robert McCulloch, Statistics, ongoing Master's:

3. Nishtha Shah, co-advised with Kookjin Lee, Computer Science, "Tree-guided personalized classification and regression tree models with applications to precision diagnostics", 2023 (First Job: Machine learning engineer, Adobe, San Jose, CA)

 Cayden Goeringer, co-advised with Jeniffer Broatch, Biological Data Science, "Meta-analysis of multi-cancer biomarker discovery", 2024 (First job: Intern, Arizona Commerce Authority, Phoenix, AZ)

Undergraduate:

5. Danielle Brister, Barrett, the Honors College, "Evaluating biomarkers for heterogeneous diseases: from receiver operating characteristics curves to jittered dot plot and averaged above mean difference analysis", 2021 (First Job: Master's student, College of Public Health, National Taiwan University (NTU). Finalist for 2022 Fulbright Study Grant to NTU.)

Member, Dissertation or Thesis Committee

PhD:

- 1. Robert Yao, Biomedical Informatics, 2018
- 2. Mariah Sullivan, Exercise & Nutritional Science, 2022
- 3. Shalini Sivanandam, Biomedical Informatics, 2023
- 4. Meredith Abrams, Biomedical Informatics, ongoing

Master's:

5. Tianchen Mu, Computer Science, 2023

Undergraduate:

6. Erick Enriquez, Barret, the Honors College, ongoing

Director, Applied or Capstone Projects

Master's:

- 1. Aditya Sharma, Computer Science, 2018-2020
- 2. Ketan Patil, Computer Science, 2019
- 3. Surya Tenneti, Computer Science, 2020
- 4. Iphsa Banerjee, Biomedical Informatics, 2021
- 5. Ryan Hayden, Statistics, 2022-2023
- 6. Shilpa Baskaran, Biomedical Informatics: BMI 593, 2023 Spring

Undergraduate:

- 7. Alisha Thomas, Undergraduate student, Biomedical Informatics, 2019
- 8. Alvi Habib, Undergraduate student, Computer Science, 2020
- 9. Rohit Nandakumar, Barrett Honors College: Honors Enrichment Contract, 2020 Spring
- 10. Mohamad Sadaat, Biomedical Informatics: BMI 482/483, 2022 Fall-2023 Spring
- 11. Akshaya Gunasekaran, Biomedical Informatics, 2024
- 12. Sayantani Mukherjee, Biomedical Informatics, 2024

Supervisor, Staff Statistician

- 1. Paul Maranian, MS, 2018
- 2. Stacy Williams, MS, 2019-present

SERVICE

Tenure-Track Ad Hoc Review Committee

2023 Spring Member 2020 Spring Member

Faculty Hiring Committee

2024 Spring Member, Biostatistics Faculty Search 2022 Spring Member, Biostatistics Faculty Search 2021 Spring Member, Biostatistics Faculty Search

Member, Biomedical Informatics Faculty Search 2020 Spring

Faculty Service Committee

2019 Spring Member

Peer Teaching Evaluation

2023 Spring Reviewer 2022 Spring Reviewer 2020 Fall Reviewee

Biomedical Informatics Program, College of Health Solutions, ASU

Admission Committee

2022 Fall-2024 Spring Chair 2020 Spring-2022 Spring Member

Academic Program Committee

2023 Spring-present Member Member 2018 Fall-2019 Spring PhD Comprehensive and Oral Exam Committee

2020 Fall-2024 Spring Member

Biomedical Informatics & Diagnostics Research Symposium

2020 Spring Poster Judge

Biostatistics Program, College of Health Solutions, ASU

Admission Committee

2024 Spring Chair