

Wenyan Ji

Research Associate

Center for Biostatistics & Health Data Science, Virginia Tech

Email: wenyanj@vt.edu

EDUCATION

University at Buffalo, The State University of New York | Buffalo, NY

May 2018

Master of Arts in Biostatistics

Nanjing University of Technology | Nanjing, China

Master of Engineering in Biochemical Engineering

June 2014

Bachelor of Science in Biotechnology

June 2011

WORKING & RESEARCH EXPERIENCE

Center for Biostatistics & Health Data Science, Virginia Tech | Roanoke, VA

September 2021 - Present

Research Associate (SAS, R)

- Wide-range Collaboration
- Statistical Analysis Support
- Statistical Methodologies Development
- Grant Proposals and Manuscripts Preparation

Roswell Park Comprehensive Cancer Center | Buffalo, NY

August 2018 - September 2021

Biostatistician (SAS, R)

- Applied statistical methods primarily in clinical trial design, focusing on a wide variety of therapeutic areas, such as cardiovascular/metabolic, hematology and oncology.
- Participated in the collaboration with researchers and investigators on the design and analysis of clinical trial studies and projects.

Strategies used: Wilcoxon Rank Sum Test, Fisher's Exact Test, Log-rank Test, Propensity Score Method, etc.

Models used: Logistic Regression Model, Cox Regression Model, Mixed Model, etc.

Roswell Park Comprehensive Cancer Center | Buffalo, NY

June 2018 - August 2018

Laboratory Technician (SAS, R)

- Manipulated microbiome data, applied statistical approaches to demonstrate the effects of alpha diversity on treatment, SNP variant alleles, demographic and diet covariates.
- Performed existing normalization methods and differential abundance analysis to deal with the problem generated by the relative abundance of taxa.
- Applied statistical approaches to investigate the effects of five hormones on SNP variant alleles, adjusted for Body Mass Index, Baseline Age and Smoking Status.
- Developed different strategies and approaches to extract the dominant metabolic pathways, which account for the post intervention of flaxseed most and which account for race difference.

Strategies used: Mixed Model with Repeated Measure, PLS-DA, sPLS-DA, sPCA, Wilcoxon Test, Partitioning Clustering Method, Hierarchical Clustering Method.

Roswell Park Comprehensive Cancer Center | Buffalo, NY

September 2017 - May 2018

Research Apprentice (SAS, R)

- Developed new strategies and approaches on longitudinal data to extract significant demographic covariates that may correlate with the breast cancer.
- Constructed models to demonstrate associations between sociodemographic, personal characteristics, dietary habits and lignan metabolism.

- Constructed models to demonstrate associations between sociodemographic, personal characteristics, dietary habits and hormones.
- Merged, mined, categorized multiple databases from epidemiological research records.

Strategies used: Mixed Model with Repeated Measure, Model Selection, Principle Component Analysis, Decision tree, Partial Least Squares, K-means, K-medoids, etc.

Models used: simple linear model, general linear model, generalized linear model.

SKILLS

- Programming: SAS (Base, Macro, SQL, IML), R, Rmarkdown, Latex, Matlab
- Software: Microsoft Office, Photoshop, CorelDRAW, 3DMAX

CERTIFICATES & AWARDS

- SAS Certified Base Programmer for SAS 9
- SAS Certified Advanced Programmer for SAS 9
- National Scholarship for Distinguished Graduate Student, China, 2014
- The Best Poster Presentation at International Symposium on Bio-catalysis and Biosynthetic Engineering, China, 2013

PATENTS & APPLICATIONS

- Jingjing Xie, **Wenyan Ji**, Hanjie Ying, Wujin Sun, Ting Guo, Yong Chen, Xiaochun Chen, Jinglan Wu. Use Of *N*-acetylneuraminic acid aldolase in catalytic synthesis of *N*-acetylneuraminic acid (Active).
- Jingjing Xie, **Wenyan Ji**, Hanjie Ying, Wujin Sun, Ting Guo, Yong Chen, Xiaochun Chen, Jinglan Wu. Use of *N*-acetylneuraminic acid aldolase in catalytic synthesis of *N*-acetylneuraminic acid (Authorized) (In Chinese).
- Hanjie Ying, **Wenyan Ji**, Jingjing Xie, Wujin Sun, Yong Chen, Xiaochun Chen, Jinglan Wu. Application of *N*-acetylglucosamine 2-epimerase in production of *N*-acetylmannosamine (Authorized) (In Chinese).
- Jingjing Xie, Wujin Sun, Hanjie Ying, Ting Guo, **Wenyan Ji**, Jiecheng Zhu, Xiaochun Chen, Yong Chen, Jinglan Wu. Codon optimization and expression of one *N*-acetylglucosamine 2-epimerase (Authorized) (In Chinese).

JOURNAL PUBLICATIONS

- Adil Mir, Varun Kesar, Seo Hyun Kim, Anna Buhle, Abra Roberts, Neha Singh, **Wenyan Ji**, Alicia Lozano, Alexandra Hanlon, Douglas Grider (2024). Behind the screen: underreported contribution of the expert radiologist in inflammatory bowel disease conferences and patient care. *Clinical Imaging*, 107.
- Ilana Zuckerman, Judy Force, Alexandra L Hanlon, Alicia J Lozano, **Wenyan Ji**, Jamie G Anderson (2023). Periodontal Pocket Therapy Using a Class IV Dental Diode Laser in Dogs: A Retrospective Analysis. *Journal of Veterinary Dentistry*, 41(2).
- Kathy C Richards, Alicia J Lozano, Jennifer Morris, Stephen T Moelter, **Wenyan Ji**, Vani Vallabhaneni, Yanyan Wang, Luqi Chi, Eric M Davis, Cindy Cheng, Vanessa Aguilar, Sneha Khan, Mira Sankhavaram, Alexandra L Hanlon, David A Wolk, Nalaka Gooneratne (2023). Predictors of Adherence to Continuous Positive Airway Pressure in Older Adults With Apnea and Amnesic Mild Cognitive Impairment. *The Journals of Gerontology*, 78(10), 1861-1870.
- Rajesh Kunadharaju MD, Arjun Saradna MD, Andrew Ray PT, PhD, Han Yu PhD, MBBS, **Wenyan Ji** MA, Michelle Zafron MLS, Martin Jeffery Mador MD (2023). Post-Operative Outcomes of Pre-Thoracic Surgery Respiratory Muscle Training vs Aerobic Exercise Training: A Systematic Review and Network Meta-analysis. *Archives of Physical Medicine and Rehabilitation*, 104(5), 790-798.
- Seo Hyun Kim, MD, Anna Buhle, MD, Abra Roberts, MD, Neha Singh, BS, Adil Mir, MD, Varun Kesar, MD, Alicia Lozano, MS, **Wenyan Ji**, MA, Alexandra Hanlon, MS, Ph.D, Douglas Grider, MD (2023). Multidisciplinary Inflammatory Bowel Disease Conference: The Impact of the Expert Pathologist on Patient Care. *Inflammatory Bowel Disease*.
- J. Schick, R.M. Lanciano, J. Feng, A. Whitlark, P. Pancholy, **W. Ji**, A. Hanlon, A. Lozano, J. Lamond (2023). High

Risk Prognostic Factors Predictive of Outcome Following Stereotactic Body Radiation Therapy (SBRT) for Early-Stage Lung Cancer. *International journal of radiation oncology, biology, physics*, 117(2s), e55-e56.

- C. Hardy Abeloos, D. Gorovets, A. Lewis, **W. Ji**, A. Lozano, C.C. Tung, F. Yu, A. Hanlon, H. Lin, A. Kha, Y. Yamada, R. Kabarriti, S. Lazarev, S. Hasan, A.M. Chhabra, C.B. Simone II, I.J. Choi (2023). Prospective Evaluation of Patient-Reported Outcomes of Invisible Ink Tattoos for the Delivery of External Beam Radiation Therapy: The PREFER Trial. *International journal of radiation oncology, biology, physics*, 117(2s), e234.
- Jean Marie Place, Kristin Van De Griend, Mengxi Zhang, Melanie Schreiner, Tanya Munroe, Amy Crockett, **Wenyan Ji**, Alexandra L Hanlon (2023). National assessment of obstetrics and gynecology and family medicine residents' experiences with CenteringPregnancy group prenatal care. *BMC Pregnancy and Childbirth*, 23(1), 805.
- Arielle Brackett, Elizabeth McCarthy, **Wenyan Ji**, Alexandra Hanlon, Robin Ellis, John Getchell, Caitlin Halbert (2023). Safety and feasibility of destination care for bariatric surgery: a single institution retrospective study. *Surgical Endoscopy*, 37(12):9609-9616.
- Amanda C Przespolewski, Joseph R Hanson, **Wenyan Ji**, Tara Cronin, Joseph D Tario Jr, Eunice S Wang (2023). Increased Monocytic Myeloid-Derived Suppressor Cells Are Associated with Inferior Overall Survival in Patients with Newly Diagnosed Acute Myeloid Leukemia. *Blood*, 142, 6023.
- Hassan Awada, Manasa Bhatta, Han Yu, **Wenyan Ji**, Surui Hou, Tara Cronin, Sheeba Ba Aqeel, Arya Mariam Roy, Muhammad Salman Faisal, Peter Kouides, John Mascarenhas, Elizabeth A Griffiths, Amro Elshoury (2023). ASXL1 mutation is a novel risk factor for bleeding in Philadelphia-negative myeloproliferative neoplasms. *Leukemia*, 1-5.
- Christos Fountzilias, Sylvia Alarcon Velasco, Wiam Bshara, Charles M LeVe, Medhavi Gupta, **Wenyan Ji**, Anthony George, Kristopher Attwood, Renuka V Iyer (2023). Evaluation of the serotonin pathway as a biomarker in cholangiocarcinoma. *Journal of Gastrointestinal Oncology*, 14(5), 2192-2201.
- Emese Zsiros, Jason Ricciuti, Steven Gallo, Deanna Argentieri, Kristopher Attwood, **Wenyan Ji**, Alan Hutson, Paul Visco, Devon Coffey, Grazyna Riebandt, Jaron Mark, Aaron Varghese, Suzanne M Hess, Thomas Furlani, Andrew Fabiano, Mark Hennon, Sai Yendamuri, Eric C Kauffman, Kimberly E Wooten, Wesley L Hicks, Jessica Young, Kazuaki Takabe, Kunle Odunsi, Amy A Case, Brahm H Segal, Candace S Johnson, Boris Kuvshinoff, Steven Nurkin, Gyorgy Paragh, Oscar de Leon-Casasola (2023). Postoperative Restrictive Opioid Protocols Resulted in Durable Changes in Opioid Prescribing and Reduced Chronic Opioid Use. *JAMA Oncology*, 9(2), 234-241.
- Kunadharaju, R., Saradna, A., Ray, A., Yu, H., **Ji, W.**, Zafron, M., & Mador, M. J. (2022). Post-Operative Outcomes of Pre-Thoracic Surgery Respiratory Muscle Training Vs. Aerobic Exercise Training: A Systematic Review and Network Meta-analysis. *Archives of physical medicine and rehabilitation*, S0003-9993(22)01728-2.
- Khoury, T., Aljabab, S., Yao, S., Ambrosone, C., Omilian, A., Attwood, K., **Ji, W.**, Gandhi, S. (2022). Tumor-associated mononuclear cells in the tumor bed of triple-negative breast cancer associate with clinical outcomes in the post-neoadjuvant chemotherapy setting. *Breast Cancer Research and Treatment*, 194(3), 531-540.
- Mazen Jizzini, Othman Salim Akhtar, Kris Atwood, **Wenyan Ji**, Jordan Pleskow, Taha Bat, Sophia Balderman (2022). Anti-Xa based dosing of enoxaparin in hematopoietic stem cell transplant and adoptive cell therapy patients: A single center experience. *Thrombosis Research*, 211, 6-9.
- Gandhi, S., Attwood, K., **Ji, W.**, Aljabab, S., & Khoury, T. (2022). Abstract P4-06-04: The role of axillary lymph node status in residual cancer burden calculation of triple negative breast cancer post-neoadjuvant cytotoxic chemotherapy. *Cancer Research*, 82(4_Supplement).
- Amro Elshoury, Han Yu, **Wenyan Ji**, James E Thompson, Elizabeth A Griffiths, Amanda Przespolewski, Steven Daniel Green, Pamela J Sung, Hassan Awada, Eunice S Wang, Peter A Kouides (2021). ASXL1 Mutation Is a Novel Risk Factor for Bleeding in Patients with Philadelphia-Negative Myeloproliferative Neoplasms (MPN). *Blood*, 138, 3637.
- Jason Ricciuti, Aaron Varghese, Steven Gallo, Deanna Argentieri, **Wenyan Ji**, Alan Hutson, Jaron Mark, Emese Zsiros (2021). Using restrictive opioid protocols for postsurgical pain management does not compromise

patient reported outcomes. *Gynecologic Oncology*, 162, S325-S326.

- Emam, A., Hermann, G., Attwood, K., **Ji, W.**, James, G., Kuettel, M., & Mohler, J. (2021). Oncologic outcome of radical prostatectomy versus radiotherapy as primary treatment for high and very high risk localized prostate cancer. *The Prostate*, 81(4), 223-230.
- Gupta, M., Gosain, R., Sarma, M., Perimbeti, S., Attwood, K., **Ji, W.**, Gandhi, S., & Abdou, Y. (2021). Abstract PS7-29: Racial disparities in breast cancer outcomes: A SEER population based study. *Cancer Research*, 81(4 Supplement), PS7-29-PS7-29.
- Przepolewski, A., Muppidi, M., Freyer, C., **Ji, W.**, Cronin, T., Thota, S., Griffiths, E., Thompson, J., Ontiveros, E., Baron, J., & others (2021). Cladribine, cytarabine, and GCSF with and without mitoxantrone (CLAG ± M) is highly effective for poor risk acute myeloid leukemia with adverse karyotype and prior hypomethylating therapy. *Leukemia & Lymphoma*, 1-6.
- Gabriel, E., Kim, M., Fisher, D., Mangum, C., Attwood, K., **Ji, W.**, Mukhopadhyay, D., Bagaria, S., Robertson, M., Dinh, T., & others (2021). A pilot trial of intravital microscopy in the study of the tumor vasculature of patients with peritoneal carcinomatosis. *Scientific reports*, 11(1), 1-13.
- Mangum, C., Kim, M., Fisher, D., Attwood, K., **Ji, W.**, Mukhopadhyay, D., Bagaria, S., Robertson, M., Dinh, T., Knutson, K., & others (2021). Intravital Mroscopy in the Study of the Tumor Vasculature of Patients with Peritoneal Carcinomatosis. *ANNALS OF SURGICAL ONCOLOGY*, 28(SUPPL 1), S115-S115.
- Farrugia, M., Erickson, K., Wendel, E., Platek, M., **Ji, W.**, Attwood, K., Ma, S., Gu, F., Singh, A., & Ray, A. (2021). Change in Physical Performance Correlates with Decline in Quality of Life and Frailty Status in Head and Neck Cancer Patients Undergoing Radiation with and without Chemotherapy. *Cancers*, 13(7), 1638.
- Ricciuti, J., Gallo, S., Argentieri, D., Visco, P., Attwood, K., **Ji, W.**, Fabiano, A., Hennon, M., Kauffman, E., Wooten, K., & others (2021). Less is more: Postoperative pain management using restrictive opioid protocols in all surgical services in a comprehensive cancer center. *Journal of Clinical Oncology*, 39(15_suppl), 103-103.
- Gandhi, S., Pandey, M., Attwood, K., **Ji, W.**, Witkiewicz, A., Knudsen, E., Allen, C., Tario, J., Wallace, P., Cedeno, C., & others (2021). Phase I clinical trial of combination propranolol and pembrolizumab in locally advanced and metastatic melanoma: safety, tolerability, and preliminary evidence of antitumor activity. *Clinical Cancer Research*, 27(1), 87-95.
- Trumbull, D., Lemini, R., Vico, T., Jorgensen, M., Attwood, K., **Ji, W.**, Brady, M., Gabriel, E., & Kukar, M. (2021). Prognostic significance of complete pathologic response obtained with chemotherapy versus chemoradiotherapy in gastric cancer. *Annals of Surgical Oncology*, 28(2), 766-773.
- Peng, J., Brady, M., **Ji, W.**, Attwood, K., Kukar, M., & Hochwald, S. (2020). Is the National Surgical Quality Improvement Program Calculator Predictive of Outcomes After Minimally Invasive Esophagectomy?. *ANNALS OF SURGICAL ONCOLOGY*, 27(SUPPL 1), S166-S166.
- Peng, J., Brady, M., **Ji, W.**, Attwood, K., Hochwald, S., & Kukar, M. (2020). Predictors of Early Recurrence After Resection for Esophageal and Gastroesophageal Junction Cancer. *ANNALS OF SURGICAL ONCOLOGY*, 27(SUPPL 1), S185-S185.
- Peng, J., Brady, M., **Ji, W.**, Attwood, K., Hochwald, S., & Kukar, M. (2020). Impact of Smoking Status on Postoperative and Oncologic Outcomes After Esophagectomy for Gastroesophageal Junction Cancer. *ANNALS OF SURGICAL ONCOLOGY*, 27(SUPPL 1), S166-S167.
- Hanif, A., Khan, S., Mantri, N., Hanif, S., Saleh, M., Alla, Y., Chinta, S., Shrestha, N., **Ji, W.**, Attwood, K., & others (2020). Thrombotic complications and anticoagulation in COVID-19 pneumonia: a New York City hospital experience. *Annals of hematology*, 99(10), 2323-2328.
- Gupta, M., Gosain, R., Sarma, M., Perimbeti, S., Kristopher, A., **Ji, W.**, Gandhi, S., & Abdou, Y. (2020). Abstract PO-221: Racial disparities in breast cancer characteristics and outcomes among Hispanic and White patients. *Cancer Epidemiology and Prevention Biomarkers*, 29(12 Supplement), PO-221-PO-221.
- Abdou, Y., Elkhany, A., Attwood, K., **Ji, W.**, Takabe, K., & Opyrchal, M. (2019). Primary and secondary breast angiosarcoma: single center report and a meta-analysis. *Breast cancer research and treatment*, 178(3), 523-533.
- Przepolewski, A., Freyer, C., **Ji, W.**, Cronin, T., Thota, S., Griffiths, E., Thompson, J., Elshoury, A., Baron, J., Walsh, M., & others. (2019). Cladribine, Cytarabine, Granulocyte Colony Stimulating Factor ± Mitoxantrone (CLAG ± M)

Is Highly Effective Therapy for Secondary and Relapsed/Refractory Acute Myeloid Leukemia. *Blood, The Journal of the American Society of Hematology*, 134(Supplement_1), 1361-1361.

- Lone*, Z., Khan, H., Steele, M., Bizovi, J., Elsayed, A., Aldhaam, N., Hussein, A., **Ji, W.**, Attwood, K., Davidson, R., & others (2019). PD63-11 ART HEALS: DOES ART THERAPY HELP IN THE RECOVERY OF PATIENTS AFTER MAJOR ONCOLOGIC SURGERY?. *The Journal of Urology*, 201(Supplement 4), e1116–e1116.
- Lemini, R., Attwood, K., Almeray, T., Gunn, J., Yeager, T., Elias, A., Partain, K., Jorgensen, M., **Ji, W.**, Gabriel, E., & others (2019). Is metastasectomy a worthy option?—the role of surgery in metastatic colon cancer to liver and lungs. *Journal of gastrointestinal oncology*, 10(6), 1032.
- Yeager, T., Partain, K., Gunn, J., Almeray, T., Lemini, R., **Ji, W.**, Attwood, K., Bagaria, S., & Gabriel, E. (2019). The Prognostic Significance of the Lymph Node Ratio in Gastric Neuroendocrine Tumors. *ANNALS OF SURGICAL ONCOLOGY*, 26, S130–S130.
- Terhune, J., Fisher, D., Khushalani, N., **Ji, W.**, Attwood, K., & Skitzki, J. (2019). Identification of Immunotherapy Targets After IL-2 Treatment. *ANNALS OF SURGICAL ONCOLOGY*, 26, S162–S163.
- Sun, W., Hu, Q., **Ji, W.**, Wright, G., & Gu, Z. (2017). Leveraging physiology for precision drug delivery. *Physiological reviews*, 97(1), 189–225.
- Sun, W., **Ji, W.**, Hu, Q., Yu, J., Wang, C., Qian, C., Hochu, G., & Gu, Z. (2016). Transformable DNA nanocarriers for plasma membrane targeted delivery of cytokine. *Biomaterials*, 96, 1–10.
- **Ji, W.**, Sun, W., Feng, J., Song, T., Zhang, D., Ouyang, P., Gu, Z., & Xie, J. (2015). Characterization of a novel N-acetylneuraminic acid lyase favoring industrial N-acetylneuraminic acid synthesis process. *Scientific reports*, 5(1), 1–9.
- Sun, W., **Ji, W.**, Hall, J., Hu, Q., Wang, C., Beisel, C., & Gu, Z. (2015). Titelbild: Self-Assembled DNA Nanoclews for the Efficient Delivery of CRISPR–Cas9 for Genome Editing (Angew. Chem. 41/2015). *Angewandte Chemie*, 127(41), 12045–12045.
- Sun, W., **Ji, W.**, Hall, J., Hu, Q., Wang, C., Beisel, C., & Gu, Z. (2015). Self-assembled DNA nanoclews for the efficient delivery of CRISPR–Cas9 for genome editing. *Angewandte Chemie*, 127(41), 12197–12201.
- Sun, W., **Ji, W.**, Hall, J., Hu, Q., Wang, C., Beisel, C., & Gu, Z. (2015). CRISPR–Cas9 Delivery by DNA Nanoclews for Efficient Genome Editing. *MRS/ASM/AVS 2015*, 51.
- Sun, W., **Ji, W.**, Hall, J., Hu, Q., Wang, C., Beisel, C., & Gu, Z. (2015). Efficient delivery of CRISPR–Cas9 for genome editing via self-assembled DNA nanoclews. *Angewandte Chemie (International ed. in English)*, 54(41), 12029.
- Sun, W., **Ji, W.**, Hall, J., Hu, Q., Wang, C., Beisel, C., & Gu, Z. (2015). Cover Picture: Self-Assembled DNA Nanoclews for the Efficient Delivery of CRISPR–Cas9 for Genome Editing (Angew. Chem. Int. Ed. 41/2015). *Angewandte Chemie International Edition*, 54(41), 11877–11877.
- Sun, W., **Ji, W.**, Li, N., Tong, P., Cheng, J., He, Y., Chen, Y., Chen, X., Wu, J., Ouyang, P., & others (2013). Construction and expression of a polycistronic plasmid encoding N-acetylglucosamine 2-epimerase and N-acetylneuraminic acid lyase simultaneously for production of N-acetylneuraminic acid. *Bioresource technology*, 130, 23–29.