# Ravinder Singh

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Division of Biostatistics| Department of Population Health Sciences | Google Scholar

## EDUCATION

**University Of Utah**                                                                                    Utah, USA
*PhD Candidate in Biostatistics, Population Health Sciences*                    *Aug 2021 - July 2026 (expected)*

**Thesis Work**: Estimation of Heterogeneous Treatment Effect in Randomized and Non-Randomized Study.

**Committee**: Dr. Tom Greene (advisor), Dr. Yizhe Xu, Dr. Jincheng Shen, Dr. Srinivasan Beddhu, Dr. Adam Bress

**Bowling Green State University**                                                                    Ohio, USA
*MS in Applied Statistics*                                                                        *Aug 2018 - May 2020*

**Indian Institute of Science Education and Research**                                        Kerala, India
*BS-MS Dual Degree (Mathematics)*                                                            *Aug 2013 - May 2018*

**Advisor**: Dr. MP Rajan

## RESEARCH PUBLICATIONS

- Catherine G Derington, Amara Sarwal, Guo Wei, Sydney E Hartsell, Michael Throolin, **Ravinder Singh**, McKenna R Nevers, Chong Zhang, Niharika Katkam, Augustine Takyi, Akhil R Chakravartula, Poorvika Babu, Vikrant G Deshmukh, Robert E Boucher, Stavros G Drakos, Tom Greene, Jincheng Shen, Srinivasan Beddhu. "Liraglutide vs Semaglutide vs Dulaglutide in Veterans with Type 2 Diabetes." *JAMA Netw Open. 2025 Oct.*

- Amara Sarwal, **Ravinder Singh**, Guo Wei, Jincheng Shen, McKenna Nevers, Sydney E Hartsell, Catherine G Derington, Augustine Takyi, Akhil R Chakravartula, Niharika Katkam, Robert E Boucher, Stavros G Drakos, Tom Greene, Srinivasan Beddhu. "Glycemic Therapies and the Risk of Gastrointestinal Adverse Events in Veterans with Type 2 Diabetes." *Diabetes Obes Metab. 2025 Jul 30.*

- Lina Brinker, Konstantinos Sideris, Guo Wei, **Ravinder Singh**, McKenna R Nevers, Sydney E Hartsell, Amara Sarwal, Christos P Kyriakopoulos, Eleni Tseliou, Jan Benes, Vojtech Melenovsky, Stavros G Drakos, Thomas C Hanff, Spencer Carter, James C Fang, Monique Cho, Srinivasan Beddhu, Josef Stehlik. "Diabetes Therapy With SGLT2i After Heart Transplant: A Multi-Institutional Analysis." *JACC Heart Fail. 2025 Jun 25.*

- Jincheng Shen, Amara Sarwal, **Ravinder Singh**, Sydney E Hartsell, Guo Wei, McKenna Nevers, Jesse C Christensen, Augustine Takyi, Niharika Katkam, Catherine G Derington, Vikrant G Deshmukh, Robert E Boucher, Stavros G Drakos, Tom Greene, Srinivasan Beddhu. "Comparative Effectiveness of Insulin Glargine, Glucagon-like Peptide-1 Receptor Agonists and Sodium-Glucose Cotransporter-2 Inhibitors in Veterans with Type 2 Diabetes." *Diabetes Obes Metab. 2025 Apr.*

- Amara Sarwal, Robert E. Boucher, Nikita Abraham, **Ravinder Singh**, Xiangyang Ye, Farahnaz Moghaddam, Sydney E. Hartsell, Guo Wei, Srinivasan Beddhu. "Associations of Hyponatremia with Cognition Function and All-Cause Mortality: Post Hoc Analysis of the Systolic BP Intervention Trial." *Kidney360 4(10):p 1362-1370, October 2023.*

- Trent D. Buskirk, Brian P. Blakely, Adam Eck, Richard McGrath, **Ravinder Singh** and Youzhi Yu. "Sweet Tweets! Evaluating a New Approach for Probability-Based Sampling of Twitter." *EPJ Data Sci. 11, 9 (2022).*

- Indravash Chowdhury, **Ravinder Singh**, Christopher Kluse and Mohammad Mayyas. "The Effect of Obstacle Design Architectures on Randomly Ranging AGVs in a Shared Workspace." *Advances in Science, Technology and Engineering Systems Journal, vol. 6, no. 5, pp. 335-347 (2021).*

## Publications in Progress

- Sydney E. Hartsell, Guo Wei, **Ravinder Singh**, Michael Throolin, McKenna R. Nevers, Amara Sarwal, Catherine G. Derington, Christa Curtis, Robert E. Boucher, Jincheng Shen, Stavros Drakos, Tom Greene, Srinivasan Beddhu. "Comparative Effectiveness of SGLT2i and GLP-1RA on Kidney and Cardiovascular Outcomes by Kidney Failure Risk." *Conditionally accepted at JASN.*

- Sydney E. Hartsell, Catherine G. Derington, **Ravinder Singh**, Guo Wei, Amara Sarwal, McKenna R. Nevers, Michael Throolin, Ana Mosquera Umbacia, Robert E. Boucher, Jason N. Katz, MD, Terrence Bjordahl, Tahir Zaman, James C. Fang, Alfred K Cheung, Stavros G. Drakos, MD, Tom Greene, Jincheng Shen, Srinivasan Beddhu. "Systolic Blood Pressure and Heart Failure Risk with SGLT2 Inhibitors Versus GLP-1 Receptor Agonists in Type 2 Diabetes." *Under review at Circulation.*

- Shalini Kasera, Sydney E. Hartsell, Guo Wei, Amara Sarwal, McKenna R. Nevers, **Ravinder Singh**, Robert Boucher, Stavros G. Drakos, Catherine G. Derington, PharmD, Srinivasan Beddhu. "Comparative Effectiveness of Synthetic Glucagon-Like Peptide-1 Receptor Agonists and Sodium-Glucose Cotransporter-2 Inhibitors on Weight Loss by Chronic Kidney Disease in Persons with Type 2 Diabetes." *Under review at AJKD.*

- Amara Sarwal, Michael Throolin, Guo Wei, Sydney E. Hartsell, **Ravinder Singh**, Jincheng Shen, McKenna Nevers, Robert Boucher, Tom Greene, Srinivasan Beddhu. "Comparison of common anti-epileptic medications on kidney outcomes and mortality in veterans with type 2 diabetes: valproic acid, lamotrigine, carbamazepine and levetiracetam." *In preparation to CJASN.*

## Thesis Work [Publications in Progress]

- **Ravinder Singh**, Tom Greene, Srinivasan Beddhu, Yizhe Xu. "R-Learner Based Estimation of Heterogeneous Treatment Effects of SGLT2i vs GLP-1RA on Cardio-Renal Outcomes in Veterans with Type 2 Diabetes." *In preparation.*

- **Ravinder Singh**, Tom Greene, Srinivasan Beddhu, Jincheng Shen. "Targeted-Learning Based Estimation of Heterogeneous Treatment Effects of SGLT2i vs GLP-1RA on Heart Failure Outcomes in Veterans with Type 2 Diabetes." *In preparation.*

- **Ravinder Singh**, Adam Bress, Tom Greene. "Simulation Study to Compare Risk- and Effect- Modeling Approaches for Estimating Individualized Treatment Effects in Randomized Controlled Trials." *In preparation.*

## Technical Skill Set

**R Programming Language  |  STATA  |  REDCap  |  SAS  |  Python**

## Job Experience

**Department of Veteran Affairs**                                                    Utah, USA
*Research Assistant (Without Compensation)*                         *Jan 2022 - Current*


**Daiichi Sankyo Inc.**                                                     New Jersey, USA
*Biostatistics Intern*                                                     *Jun 2024 - Aug 2024*


**Bowling Green State University**                                                   Ohio, USA
*Assistant Teaching Professor*                                         *Aug 2019 - Dec 2020*

## WORKSHOPS AND CONFERENCES

**Symposium on Data Science and Statistics (SDSS)**   Utah, USA
*Attended*   *Apr 2025*

**DELPHI Workshop: Machine Learning with R**   Utah, USA
*Teaching Assistant*   *Mar 2025*

**DELPHI Workshop: Advanced R for Data Analysis**   Utah, USA
*Teaching Assistant*   *Oct 2024*

**DELPHI Workshop: Introduction to R for Data Science**   Utah, USA
*Teaching Assistant*   *Aug 2024*

**Joint Statistical Meeting (JSM)**   Oregon, USA
*Attended*   *Aug 2024*