

Curriculum Vitae

ERIKA S. HELGESON

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Education

PhD, University of North Carolina, Chapel Hill, NC. Biostatistics	2017
BS, <i>Summa cum laude</i> , Gonzaga University, Spokane, WA. Mathematics/Biology	2012

Fellowships, Residencies, and Visiting Engagements

Fellowship

Graduate Research Fellowship Program National Science Foundation	2014 - 2017
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Academic Appointments

University of Minnesota School of Public Health, Biostatistics and Health Data Science: Associate Director of the Coordinating Centers for Biometric Research (CCBR)	2023 - Present
University of Minnesota School of Public Health, Biostatistics and Health Data Science: Associate Professor	2023 - Present
University of Minnesota School of Public Health, Biostatistics: Assistant Professor	2017 - 2023

Other Professional Positions

University of North Carolina Center for Pain Research and Innovation: Head Statistician for Pathways Study	2016 - 2017
University of North Carolina School of Public Health, Biostatistics: Graduate Research Assistant	2012 - 2014

Consulting

Statistician, Academic, University of North Carolina; North Carolina State	2015 - 2017
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Current Membership in Professional Organizations

Eastern North American Region International Biometric Society	2019 - Present
American Statistical Association	2016 - Present

HONORS AND RECOGNITION

University of Minnesota

Thank a Teacher Certificate, Center for Teaching Innovation 2020

External Sources

Invitation to ENAR Workshop for Junior Researchers 2019

Travel Grant, Women in Statistics and Data Science Conference 2016

Travel Grant, NSF Graduate Data Science Workshop 2016

Travel Grant, UW Summer Institute for Statistics in Big Data 2016

Travel Grant, NSF Graduate Data Science Workshop 2015

University of North Carolina Gillings Merit Scholarship 2012
 First year public health graduate student award

University of North Carolina Smith Anderson Award 2012
 First year biostatistics graduate student award

RESEARCH, SCHOLARSHIP, AND CREATIVE WORK

Grants, Contract, Awards: External Sources

Currently Funded

1. **Award: Randomized Trial of Non-Surgical Therapy and Oral Hygiene Instruction to Reduce Risk of Infective Endocarditis**

Role: Subcontract PI

Principal Investigator: Lockhart, Peter (Atrium Health)

Award ID: 4UH3DE031250

Sponsoring Organization: NIH Nat'l Inst of Dental & Craniofacial Research with Atrium Health (UMN Subcontract)

Award Dates: February 2, 2023- January 31, 2028

Purpose: This multi-center, randomized clinical trial will determine if an intervention to improve oral hygiene and reduce of gingival inflammation decreases the incidence and duration of bacteremia of Infective Endocarditis (IE)-causing oral bacterial species, which may refocus longstanding guidelines on prevention for all people at risk for IE. I direct the Data Coordinating Center for this study.

2. **Award: myAirvo 3 (High Flow Nasal Therapy) for COPD patients in the home**

Role: Subcontract PI

Principal Investigator: Criner, Gerard (Temple University)

Sponsoring Organization: Fisher Paykel with Temple University (UMN subcontract)

Sponsoring Organization Reference ID: CON000000094133

Award Dates: July 1, 2021 – December 31, 2026

Purpose: The study goal is to determine if high flow nasal therapy delivered by myAirvo 3 increases in the time to first moderate exacerbation or severe exacerbation or all-cause mortality in patients with moderate to very severe COPD. I direct the Data and Coordinating Center for this multicenter clinical trial.

3. **Award: Outcomes in living kidney donors over 50 years compared to a healthy matched contemporaneous nondonor cohort from the same geographical region**
 Role: Co-Investigator
 Principal Investigator: Matas, Arthur J. (University of Minnesota)
 Sponsoring Organization: NIH Natl INST of Diabetes/DIG/Kidney DIS
 Sponsoring Organization Reference ID: 5R01DK125431-02
 Award Dates: July 1, 2020 – April 30, 2025
 Purpose: Recent studies have suggested that living donors (LDs) have increased risks of kidney failure and death; but follow-up has been limited and there are serious problems with the scientific design of these studies, particularly with the characteristics of people compared to the LDs. This study will compare LDs with true long-term follow-up to an optimally matched control group (same time period, same geographic area, healthy on date of donation, no abnormal kidney function); and in addition to kidney failure and death, study intermediate events (e.g., kidney function, cardiovascular disease), pregnancy and outcomes after new-onset disease (e.g., hypertension).

4. **Award: Telemedicine-Delivered Time Restricted Eating As a Viable Alternative to Caloric Restriction for Treating Obesity in a Population with Type 2 (T2DM) diabetes**
 Role: Co-Investigator
 Principal Investigator: Chow, Lisa S. (University of Minnesota)
 Sponsoring Organization: NIH Natl INST of Diabetes/DIG/Kidney DIS
 Sponsoring Organization Reference ID: 1R01DK129668-01A1
 Award Dates: April 1, 2022 - March 31, 2025
 Purpose: This study addresses whether restricting the timing of food intake, rather than restricting total daily calories, will sustain weight loss and glycemic control in overweight/obese patients with metformin-only treated T2DM while being less burdensome than restricting total daily calories. The study highlights the potential beneficial effects of TRE on glycemic measures in patients with T2DM, for which data are lacking. This study will provide preliminary data to support a definitive (U34/U01) randomized controlled trial of TRE to treat hyperglycemia in patients with T2DM.

5. **Award: Investigation of persistent HIV immune stimulation in lymphoid tissues during therapy as a cause of sustained immune activation**
 Role: Co-Investigator
 Principal Investigator: Schacker, Timothy W. (University of Minnesota)
 Sponsoring Organization: NIH Nat'l Inst of Allergy & Infect Dis
 Sponsoring Organization Reference ID: 1R01AI147912-01A1
 Award Dates: April 3, 2020 - March 31, 2025
 Purpose: The primary hypothesis is that immune activation during antiretroviral therapy is driven by virus producing cells and/or cells expressing viral antigens; this is caused by intracellular concentrations of antiretroviral drugs in lymphoid tissues that do not completely inhibit virus replication, which creates a barrier to cure and complete immune reconstitution.

6. **Award: Clinical Registry of Dental Outcomes in Head and Neck Cancer Patients**
 Role: Subcontract PI
 Principal Investigator: Brennan, Michael (Atrium Health)
 Sponsoring Organization: NIH Nat'l Inst of Dental & Craniofacial Research with Atrium Health (UMN subcontract)
 Sponsoring Organization Reference ID: 13100310228 (A21-0106-S004)
 Award Dates: July 1, 2021 - June 30, 2024
 Purpose: This is a prospective cohort study to document long-term dental and other oral

outcomes in patients who receive external beam and modern radiation therapy (RT) modalities with curative intent, as part of clinical care for head and neck cancer. This study will examine participants of the original cohort for a visit roughly 7 years after the start of RT. I direct the Data Coordinating Center for this multi-center registry.

7. Award: Prolonged Daily Fasting As a Viable Alternative to Caloric Restriction in At-Risk Obese Humans

Role: Co-Investigator

Principal Investigator: Chow, Lisa S. (University of Minnesota)

Sponsoring Organization: NIH Natl INST of Diabetes/DIG/Kidney DIS

Sponsoring Organization Reference ID: 1R01DK124484-01

Award Dates: April 1, 2020 - December 31, 2024

Purpose: This project's objective is to examine the role of prolonged fasting in metabolic changes associated with time-restricted-eating.

Grants Previously Funded and Concluded

1. Award: Beta Blockers for the Prevention of Acute Exacerbations of COPD

Role: Subcontract PI

Principal Investigator: Dransfield, Mark (University of Alabama)

Sponsoring Organization: Department of Defense with the University of Alabama (UMN Subcontract)

Award ID: W81XWH-15-1-0705

Award Dates: October 1, 2015 – September 30, 2023

Purpose: This was a two part study. The first part (2015-2019) was a multicenter, prospective, randomized, double-blind, placebo-controlled trial of beta blockers for the prevention of chronic obstructive pulmonary disease (COPD) acute exacerbations. The second part (2020-2022) was a multicenter, prospective, observational study of beta-blocker use in patients with COPD and acute myocardial infarction. I served as Co-Investigator from June 2019- December 2021. I directed the Data Coordinating Center for this study from January 2022 to the end of the award period.

2. Award: Sigh Ventilation to Reduce the Incidence of the Acute Respiratory Distress Syndrome

Role: Subcontract PI

Principal Investigator: Albert, Richard (Denver Health)

Award ID: W81XWH-15-1-0504

Sponsoring Organization: Department of Defense with Denver Health (UMN Subcontract)

Award Dates: September 15, 2015 – March 14, 2023

Purpose: This was a multicenter, prospective, randomized trial to test the hypothesis that adding sigh breaths to usual invasive mechanical ventilation of victims of trauma who are at risk of developing ARDS will decrease the number of days they require invasive mechanical ventilation. I served as Co-Investigator from September 2021 to December 2021. I directed the Data Coordinating Center for this study from January 2022 to the end of the award period.

3. Award: COVID-19 Data Management Support Liberia Observational Study

Role: Statistician

Principal Investigators: Moses Badio, Moses and Johnson, Kumblytee (PREVAIL)

Sponsoring Organization: NIH Nat'l Inst of Allergy & Infect Dis / Leidos

Award Dates: July 1 2020 – July 1 2025

Purpose: This is an observational cohort study of individuals who test positive for SARS-CoV-2 which is conducted by the Partnership for Research on Vaccines and Infectious Diseases in Liberia (PREVAIL). One of the goals of this study is to collaborate with an international observational study of individuals who test positive for SARS-CoV-2 being conducted by the International Network for Strategic Initiatives in Global HIV Trials. I contributed to this grant from July 2020 to September 2021.

4. **Award: The effect of inflammation and damage to lymph node structures on durable protective immunity following vaccination**

Role: Co-Investigator

Principal Investigator: Schacker, Timothy W. (University of Minnesota)

Sponsoring Organization: NIH Nat'l Inst of Allergy & Infect Dis

Sponsoring Organization Reference ID: 1U01AI141981-01 Revised

Award Dates: February 25, 2019 - January 31, 2024

Purpose: There are several examples of vaccines that have limited efficacy in the developing world, especially in more tropical climates. It is likely that endemic infections with helminths, malaria, or tuberculosis can cause inflammatory damage to lymph node structures responsible for initiation and maintenance of durable immune responses to vaccines. This study will test this hypothesis by investigating the immune response to vaccination in two cohorts, one in Uganda with frequent exposures to these pathogens and the other in Minnesota where these pathogens, for the most part, do not exist. I contributed to this grant from February 2019 to July 2021.

5. **Award: Clinical Registry of Dental Outcomes in Head and Neck Cancer Patients**

Role: Co-Investigator

Principal Investigators: Brennan, Mike (Carolinas HealthCare System), Hodges, James (Subcontract PI)

Award ID: 2U01DE022939

Sponsoring Organization: NIH Nat'l Inst of Dental & Craniofacial Research with the Carolinas HealthCare System (UMN Subcontract)

Award Dates: September 26, 2012 - June 30, 2021

Purpose: This is a prospective cohort study to document dental and other oral outcomes in patients who receive external beam radiation therapy with curative intent, as part of clinical care for head and neck cancer. The primary outcome was the two-year rate of tooth loss. Secondary outcomes included measures of dental caries, periodontal health, salivary flow, and exposed bone/osteonecrosis. I contributed to this grant from July 2018 to June 2021.

6. **Award: Reservoir Dynamics in Patients Treated In Early Acute HIV Infection**

Role: Statistician

Principal Investigator: Schacker, Timothy (University of Minnesota)

Award ID: 1R01AI125127

Sponsoring Organization: NIH Nat'l Inst of Allergy & Infect Dis

Date Proposal Submitted: 2016

Award Dates: July 1, 2016 - June 30, 2021

Purpose: HIV is not curable with current treatments because there is a large reservoir of infected cells that antiretroviral therapy does not clear. This latent reservoir can occasionally reactivate to make infectious virus that can spread to other cells, thus replenishing the reservoir. We studied a unique cohort of patients with acute HIV infection to understand how this reservoir is formed and maintained. A better understanding of this process may lead to new interventions that can eradicate the virus reservoir and lead the way to a cure for HIV

infection. I contributed to this grant from October 2017 to June 2021.

7. **Award: Predictors of Time to Viremia with an Analytic Treatment Interruption**
 Role: Statistician
 Principal Investigator: Schacker, Timothy (University of Minnesota)
 Award ID: 109496-60-RGR1
 Sponsoring Organization: amfAR
 Award Dates: July 1, 2016- December 31, 2019
 Purpose: To determine if NK cell function can be restored via infusion of haploidentical NK cells and if that is associated with reduction in frequency of the HIV inducible reservoir. I contributed to this grant from June 2018 to December 2019.

8. **Award: University of Minnesota Clinical and Translational Science Institute (UMN CTSI)**
 Role: Statistician
 Principal Investigator: Blazar, Bruce (University of Minnesota)
 Award ID: 1UL1TR002494
 Sponsoring Organization: NIH Nat'l Ctr for Advancing Tran Science
 Award Dates: March 3, 2018- February, 28 2023
 Purpose: To create a nationally-recognized, shareable model of complex translational team science driven and enabled by integration and alignment of clinical and translational science (CTS) research with education, data access, community needs and industry efforts. I contributed to this grant from May to December 2019.

9. **Award: Deterioration of Kidney Allograft Function (DeKAF)**
 Role: Statistician
 Principal Investigator: Matas, A. (University of Minnesota)
 Award ID: NA
 Sponsoring Organization: Bristol-Myers Squibb
 Award Dates: January 1, 2013 - December 31, 2018
 Purpose: The DeKAF grant (Long-term Deterioration of Kidney Allograft Function) developed a multicenter consortium to define causes of late graft dysfunction (LGD) with a goal of determining, at the time of new-onset LGD, if distinct subgroups can be defined on the basis of clinical, laboratory, and pathologic information. I contributed to this grant from November 2017 to December 2018.

Publications

Asterisk() - indicates co-first author*

Underline - indicates student author

Peer-Reviewed Journal Article

1. Lee, J., Helgeson, E., Horning, M., Elgesma, K., Kubik, M., Fulkerson, J. Food insecurity and changes in diet quality and body mass index z-scores among elementary school students. *Childhood Obesity*. [Accepted:2024]
2. Lafon, D. C. (Lead Author), Helgeson, E. S., Lindberg, S., Voelker, H., Bhatt, S. P., Casaburi, R., Cassady, S. J., Connett, J., Criner, G. J., Hatipoglu, U., Kaminsky, D. A., Kunisaki, K. M., Lazarus, S. C., McEvoy, C. E., Reed, R. M., Sciurba, F. C., Stringer, W., Dransfield, M. T. A prospective, multicenter observational study of beta-blocker use and clinical outcomes in patients with COPD following acute myocardial infarction. *JAMA Network Open*. [Accepted:2024]
3. Lim, J., Helgeson, E. S., Lalla, R. V., Sollecito, T. P., Treister, N. S., Schmidt, B. L., Patton, L. L., Lin, A., Milas, Z., Brennan, M. T. (2024). Factors associated with oral hygiene compliance in patients treated with radiation therapy for head and neck cancer. *The Journal of the American Dental Association*. doi: [10.1016/j.adaj.2023.11.018](https://doi.org/10.1016/j.adaj.2023.11.018)
4. Sollecito, T. P., Helgeson, E. S., Lalla, R. V., Treister, N. S., Schmidt, B. L., Patton, L. L., Lin, A., Brennan, M. T. (2024). Reduced mouth opening in patients with head and neck cancer treated with radiation therapy: an analysis of the Clinical Registry of Dental Outcomes in Head and Neck Cancer Patients (OraRad). *Oral surgery, oral medicine, oral pathology and oral radiology*, 137(3), 264-273. PubMed Central ID Number: PMC10922984 doi: [10.1016/j.oooo.2023.11.012](https://doi.org/10.1016/j.oooo.2023.11.012)
5. Wade, R. C., Ling, S. X., Helgeson, E. S., Voelker, H., Labaki, W. W., Meza, D., O'Corragain, O., So, J. Y., Criner, G. J., Han, M. K., Kalhan, R., Reed, R. M., Dransfield, M. T., Wells, J. M. (2024). Associations Between Coronary Artery Calcium Score and Exacerbation Risk in BLOCK-COPD. *Chronic obstructive pulmonary diseases (Miami, Fla.)*, 11(1), 101-105. PubMed Central ID Number: PMC10913922 doi: [10.15326/jcopdf.2023.0423](https://doi.org/10.15326/jcopdf.2023.0423)
6. Lyden, G. R., Vock, D. M., **Helgeson, E. S.**, Finger, E. B., Matas, A. J., Snyder, J. J. (2023). Transportability of causal inference under random dynamic treatment regimes for kidney-pancreas transplantation. *Biometrics*, 79(4), 3165-3178. doi: [10.1111/biom.13899](https://doi.org/10.1111/biom.13899)
7. Albert, R. K., Jurkovich, G. J., Connett, J., **Helgeson, E. S.**, Keniston, A., Voelker, H., Lindberg, S., Proper, J. L., Bochicchio, G., Stein, D. M., Cain, C., Tesoriero, R., Brown CVR, Davis, J., Napolitano, L., Carver, T., Cipolle, M., Cardenas, L., Minei, J., Nirula, R., Doucet, J., Miller, P. R., Johnson, J., Inaba, K., Kao, L. (2023). Sigh Ventilation in Patients With Trauma: The SiVent Randomized Clinical Trial. *JAMA*, 330(20), 1982-1990. PubMed Central ID Number: PMC10600720 doi: [10.1001/jama.2023.21739](https://doi.org/10.1001/jama.2023.21739)
8. Wade, R. C., Mkorombindo, T., Ling, S. X., **Helgeson, E. S.**, MacDonald, D. M., Pew, K., Voelker, H., Bittner, V., Kunisaki, K. M., Lammi, M. R., Dransfield, M. T. (2023). Association between P-pulmonale and respiratory morbidity in COPD: a secondary analysis of the BLOCK-COPD trial. *BMC pulmonary medicine*, 23(1), 434. PubMed Central ID Number: PMC10634074 doi: [10.1186/s12890-023-02748-2](https://doi.org/10.1186/s12890-023-02748-2)
9. Brennan, M. T., Treister, N. S., Sollecito, T. P., Schmidt, B. L., Patton, L. L., Lin, A., Elting, L. S., **Helgeson, E. S.**, Lalla, R. V. (2023). Dental Caries Postradiotherapy in Head and Neck Cancer. *JDR Clinical and Translational Research*, 8(3), 234-243. doi: [10.1177/23800844221086563](https://doi.org/10.1177/23800844221086563)

10. **Palzer***, E. F., **Helgeson***, E. S., Evans, M. D., Vock, D. M., Matas, A. J. (2023). Long-term Outcomes Associated With Post-kidney Donation Pregnancy Complications. *Transplantation*, 107(7), 1615-1623. PubMed Central ID Number: PMC10293045 [doi: 10.1097/TP.0000000000004540](https://doi.org/10.1097/TP.0000000000004540)
11. **Helgeson, E. S.**, **Vempati, S.**, **Palzer, E. F.**, Mjoen, G., Haugen, A. J., Matas, A. J. (2023). Development and Validation of a Hypertension Risk Calculator for Living Kidney Donors. *Transplantation*, 107(6), 1373-1379. PubMed Central ID Number: PMC10205650 [doi: 10.1097/TP.0000000000004505](https://doi.org/10.1097/TP.0000000000004505)
12. **Vock***, D. M., **Helgeson***, E. S., Mullan, A. F., Issa, N. S., Sanka, S., Saiki, A. C., Mathson, K., Chamberlain, A. M., Rule, A. D., Matas, A. J. (2023). The Minnesota attributable risk of kidney donation (MARKD) study: a retrospective cohort study of long-term (>50 year) outcomes after kidney donation compared to well-matched healthy controls. *BMC nephrology*, 24(1), 121. PubMed Central ID Number: PMC10152793 [doi: 10.1186/s12882-023-03149-7](https://doi.org/10.1186/s12882-023-03149-7)
13. Patton, L. L., **Helgeson, E. S.**, Brennan, M. T., Treister, N. S., Sollecito, T. P., Schmidt, B. L., Lin, A., Chera, B. S., Lalla, R. V. (2023). Oral health-related quality of life after radiation therapy for head and neck cancer: the OraRad study. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*, 31(5), 286. [doi: 10.1007/s00520-023-07750-2](https://doi.org/10.1007/s00520-023-07750-2)
14. **Threet, E. J.**, Napeñas, J. J., Petersen, C., Mitchell, R., Long-Simpson, L., Shadick, R., Valentino, K. C., Rybczyk, C. A., Blake, J. A., Brown, M. C., Aidoo, R., Helgeson, E. S., Lalla, R. V., Brennan, M. T. (2023). Survey of experiences and barriers to dental care post-head and neck cancer in OraRad study participants. *Oral surgery, oral medicine, oral pathology and oral radiology*, 135(4), 501-509. PubMed Central ID Number: PMC10101878 [doi: 10.1016/j.oooo.2022.11.011](https://doi.org/10.1016/j.oooo.2022.11.011)
15. Vinson, A. J., Singh, S., Chadban, S., Cherney, D., Gaber, O., Gill, J. S., **Helgeson, E.**, Herzog, C. A., Jardine, M., Jha, V., Kasiske, B. L., Mannon, R. B., Michos, E. D., Mottl, A. K., Newby, K., Roy-Chaudhury, P., Sawinski, D., Sharif, A., Sridhar, V. S., Tuttle, K. R., Vock, D. M., Matas, A. (2022). Premature Death in Kidney Transplant Recipients: The Time for Trials is Now. *Journal of the American Society of Nephrology*, 33(4), 665-673. PubMed Central ID Number: PMC8970447 [doi: 10.1681/ASN.2021111517](https://doi.org/10.1681/ASN.2021111517)
16. **Matas***, A. J., **Helgeson***, E., Fieberg, A., Leduc, R., Gaston, R. S., Kasiske, B. L., Rush, D., Hunsicker, L., Cosio, F., Grande, J. P., Cecka, J. M., Connett, J., Mannon, R. B. (2022). Risk Prediction for Delayed Allograft Function: Analysis of the Deterioration of Kidney Allograft Function (DeKAF) Study Data. *Transplantation*, 106(2), 358-368. PubMed Central ID Number: PMC8380757 [doi: 10.1097/TP.0000000000003718](https://doi.org/10.1097/TP.0000000000003718)
17. Miller, J. S., Davis, Z. B., **Helgeson, E.**, Reilly, C., Thorkelson, A., Anderson, J., Lima, N. S., Jorstad, S., Hart, G. T., Lee, J. H., Safrit, J. T., Wong, H., Cooley, S., Gharu, L., Chung, H., Soon-Shiong, P., Dobrowolski, C., Fletcher, Courtney, V, Karn, J., Douek, D. C., Schacker, T. W. (2022). Safety and virologic impact of the IL-15 superagonist N-803 in people living with HIV: a phase 1 trial. *Nature Medicine*, 28(2), 392-400. [doi: 10.1038/s41591-021-01651-9](https://doi.org/10.1038/s41591-021-01651-9)
18. **Olawsky, E.**, **Zhang, Y.**, Eberly, L. E., **Helgeson, E. S.**, Chow, L. S. (2022). A New Analysis Tool for Continuous Glucose Monitor Data. *Journal of Diabetes Science and Technology*, 16(6), 1496-1504. PubMed Central ID Number: PMC9631526 [doi: 10.1177/19322968211028909](https://doi.org/10.1177/19322968211028909)
19. Parekh, T. M., **Helgeson, E. S.**, Connett, J., Voelker, H., **Ling, S. X.**, Lazarus, S. C., Bhatt, S. P., **MacDonald, D. M.**, **Mkorombindo, T.**, Kunisaki, K. M., Fortis, S., Kaminsky, D.,

- Dransfield, M. T. (2022). Lung Function and the Risk of Exacerbation in the BLOCK COPD Trial. *Annals of the American Thoracic Society*, 19(10), 1642-1649. [doi: 10.1513/AnnalsATS.202109-1042OC](https://doi.org/10.1513/AnnalsATS.202109-1042OC)
20. **Helgeson, E. S., Palzer, E. F., Vock, D. M., Porrett, P., Sawinski, D., Matas, A. J.** (2022). Pre-kidney Donation Pregnancy Complications and Long-term Outcomes. *Transplantation*, 106(10), 2052-2062. [doi: 10.1097/TP.0000000000004146](https://doi.org/10.1097/TP.0000000000004146)
21. Kroon, E., Chottanapund, S., Buranapraditkun, S., Sacdalan, C., Colby, D. J., Chomchey, N., Prueksakaew, P., Pinyakorn, S., Trichavaroj, R., Vasan, S., Manasnayakorn, S., Reilly, C., **Helgeson, E.**, Anderson, J., David, C., Zulk, J., de Souza, Mark, Tovanabuttra, S., Schuetz, A., Robb, M. L., Douek, D. C., Phanuphak, N., Haase, A., Ananworanich, J., Schacker, T. W. (2022). Paradoxically greater persistence of HIV RNA plus cells in lymphoid tissue when ART is initiated in the earliest stage of infection. *Journal of Infectious Diseases*, 225(12), 2167-2175. PubMed Central ID Number: PMC9200151 [doi: 10.1093/infdis/jiac089](https://doi.org/10.1093/infdis/jiac089)
22. Lalla, R. V., Treister, N. S., Sollecito, T. P., Schmidt, B. L., Patton, L. L., **Helgeson, E. S.**, Lin, A., Rybczyk, C., Dowsett, R., Hegde, U., Boyd, T. S., Duplinsky, T. G., Brennan, M. T. (2022). Radiation therapy for head and neck cancer leads to gingival recession associated with dental caries. *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology*, 133(5), 539-546. PubMed Central ID Number: PMC9018549 [doi: 10.1016/j.oooo.2022.01.016](https://doi.org/10.1016/j.oooo.2022.01.016)
23. **MacDonald, D. M., Mkorombindo, T., Ling, S. X., Adabag, S., Casaburi, R., Connett, J. E., Helgeson, E. S., Porszasz, J., Rossiter, H. B., Stringer, W. W., Voelker, H., Zhao, D., Dransfield, M. T., Kunisaki, K. M.** (2022). Heart Rate Variability on 10-Second Electrocardiogram and Risk of Acute Exacerbation of COPD: A Secondary Analysis of the BLOCK COPD Trial. *Chronic Obstructive Pulmonary Diseases*, 9(2), 226-236. [doi: 10.15326/jcopdf.2021.0264](https://doi.org/10.15326/jcopdf.2021.0264)
24. Lin, A., **Helgeson, E. S.**, Treister, N. S., Schmidt, B. L., Patton, L. L., Elting, L. S., Lalla, R. V., Brennan, M. T., Sollecito, T. P. (2022). The impact of head and neck radiotherapy on salivary flow and quality of life: Results of the ORARAD study. *Oral Oncology*, 127, 105783. PubMed Central ID Number: PMC8977268 [doi: 10.1016/j.oraloncology.2022.105783](https://doi.org/10.1016/j.oraloncology.2022.105783)
25. Ward, M. C., **Carpenter, M. D.**, Noll, J., Carrizosa, D., Moeller, B. J., **Helgeson, E. S.**, Lalla, R. V., Brennan, M. T. (2022). Oncologists' Perspective on Dental Care Around the Treatment of Head and Neck Cancer: A Pattern of Practice Survey. *JCO Oncology Practice*, 18(1), e28-e35. [doi: 10.1200/op.20.00913](https://doi.org/10.1200/op.20.00913)
26. **Helgeson, E. S., Vock, D. M., Bair, E.** (2021). Nonparametric cluster significance testing with reference to a unimodal null distribution. *Biometrics*, 77(4), 1215-1226. [doi: 10.1111/biom.13376](https://doi.org/10.1111/biom.13376)
27. Luszczek, E. R., **Ingraham, N. E., Karam, B. S., Proper, J., Siegel, L., Helgeson, E. S., Lotfi-Emran, S., Zolfaghari, E. J., Jones, E., Usher, M. G., Chipman, J. G., Dudley, R. A., Benson, B., Melton, G. B., Charles, A., Lupei, M. I., Tignanelli, C. J.** (2021). Characterizing COVID-19 clinical phenotypes and associated comorbidities and complication profiles. *PLOS ONE*, 16(3). PubMed Central ID Number: PMC8011766 [doi: 10.1371/journal.pone.0248956](https://doi.org/10.1371/journal.pone.0248956)
28. **MacDonald, D. M., Helgeson, E. S., Adabag, S., Casaburi, R., Connett, J. E., Stringer, W. W., Voelker, H., Dransfield, M. T., Kunisaki, K. M.** (2021). Chronotropic Index and Acute Exacerbations of Chronic Obstructive Pulmonary Disease A Secondary Analysis of BLOCK COPD. *Annals of the American Thoracic Society*, 18(11), 1795-1802. PubMed Central ID Number: PMC9795809 [doi: 10.1513/AnnalsATS.202008-1085OC](https://doi.org/10.1513/AnnalsATS.202008-1085OC)

29. Grande, J. P., **Helgeson, E. S.**, Matas, A. J. (2021). Correlation of Glomerular Size With Donor-Recipient Factors and With Response to Injury. *Transplantation*, 105(11), 2451-2460. PubMed Central ID Number: PMC8166916 [doi: 10.1097/TP.0000000000003570](https://doi.org/10.1097/TP.0000000000003570)
30. Hamade, Y. J., Palzer, E. F., **Helgeson, E. S.**, Hanson, J. T., Walczak, T. S., McGovern, R. A. (2021). Persistent racial and ethnic disparities as a potential source of epilepsy surgery underutilization: Analysis of large national datasets from 2006–2016. *Epilepsy Research*, 176, 106725. [doi: 10.1016/j.eplepsyres.2021.106725](https://doi.org/10.1016/j.eplepsyres.2021.106725)
31. **Helgeson, E. S.**, Mannon, R., Grande, J., Gaston, R. S., Cecka, M. J., Kasiske, B. L., Rush, D., Gourishankar, S., Cosio, F., Hunsicker, L., Connett, J., Matas, A. J. (2021). i-IFTA and chronic active T cell–mediated rejection: A tale of 2 (DeKAF) cohorts. *American Journal of Transplantation*, 21(5), 1866-1877. [doi: 10.1111/ajt.16352](https://doi.org/10.1111/ajt.16352)
32. Matas*, A. J., **Helgeson***, E. S., Gaston, R., Cosio, F., Mannon, R., Kasiske, B. L., Hunsicker, L., Gourishankar, S., Rush, D., Cecka, J. M., Connett, J., Grande, J. P. (2020). Inflammation in areas of fibrosis: The DeKAF prospective cohort. *American Journal of Transplantation*, 20(9), 2509-2521. [doi: 10.1111/ajt.15862](https://doi.org/10.1111/ajt.15862)
33. Gaston, R. S., Fieberg, A., **Helgeson, E. S.**, Eversull, J., Hunsicker, L., Kasiske, B. L., Leduc, R., Rush, D., Matas, A. J. (2020). Late Graft Loss After Kidney Transplantation: Is "Death With Function" Really Death With a Functioning Allograft? *Transplantation*, 104(7), 1483-1490. [doi: 10.1097/TP.0000000000002961](https://doi.org/10.1097/TP.0000000000002961)
34. Shaheen, A. W., Fedoriw, K. B., Khachatryan, S., Steiner, B., Golding, J., Byerley, J. S., **Helgeson, E. S.**, Dallaghan, Gary L. Beck (2020). Students Adding Value: Improving Patient Care Measures While Learning Valuable Population Health Skills. *American Journal of Medical Quality*, 35(1), 70-78. [doi: 10.1177/1062860619845482](https://doi.org/10.1177/1062860619845482)
35. **Helgeson, E. S.**, Liu, Q., Chen, G., Kosorok, M. R., Bair, E. (2020). Biclustering via sparse clustering. *Biometrics*, 76(1), 348-358. PubMed Central ID Number: PMC7028479 [doi: 10.1111/biom.13136](https://doi.org/10.1111/biom.13136)
36. Rothenberger, M., Nganou-Makamdop, K., Kityo, C., Ssali, F., Chipman, J. G., Beilman, G. J., Hoskuldsson, T., Anderson, J., Jasurda, J., Schmidt, T. E., Calisto, S. P., Pearson, H., Reimann, T., David, C., Perkey, K., Southern, P., Wietgreffe, S., **Helgeson, E.**, Reilly, C., Haase, A. T., Douek, D. C., Fletcher, C. V., Schacker, T. W. (2019). Impact of Integrase Inhibition Compared With Nonnucleoside Inhibition on HIV Reservoirs in Lymphoid Tissues. *JAIDS-Journal of Acquired Immune Deficiency Syndromes*, 81(3), 355-360. PubMed Central ID Number: PMC6582649 [doi: 10.1097/QAI.0000000000002026](https://doi.org/10.1097/QAI.0000000000002026)
37. Dransfield, M. T., Voelker, H., Bhatt, S. P., Brenner, K., Casaburi, R., Come, C. E., Cooper JAD, Criner, G. J., Curtis, J. L., Han, M. K., Hatipoğlu, U., **Helgeson, E. S.**, Jain, V. V., Kalhan, R., Kaminsky, D., Kaner, R., Kunisaki, K. M., Lambert, A. A., Lammi, M. R., Lindberg, S., Make, B. J., Martinez, F. J., McEvoy, C., Panos, R. J., Reed, R. M., Scanlon, P. D., Scieurba, F. C., Smith, A., Sriram, P. S., Stringer, W. W., Weingarten, J. A., Wells, J. M., Westfall, E., Lazarus, S. C., Connett, J. E. (2019). Metoprolol for the Prevention of Acute Exacerbations of COPD. *The New England Journal of Medicine*, 381(24), 2304-2314. PubMed Central ID Number: PMC7416529 [doi: 10.1056/NEJMoa1908142](https://doi.org/10.1056/NEJMoa1908142)
38. Knazovicky, D., **Helgeson, E. S.**, Case, B., Thomson, A., Gruen, M. E., Maixner, W., Lascelles, B. Duncan X. (2017). Replicate effects and test-retest reliability of quantitative sensory threshold testing in dogs with and without chronic pain. *Veterinary Anaesthesia and Analgesia*, 44(3), 615-624. [doi: 10.1016/j.vaa.2016.08.008](https://doi.org/10.1016/j.vaa.2016.08.008)

39. Meloto, C. B., Bortsov, A. V., Bair, E., **Helgeson, E.**, Ostrom, C., Smith, S. B., Dubner, R., Slade, G. D., Fillingim, R. B., Greenspan, J. D., Ohrbach, R., Maixner, W., McLean, S. A., Diatchenko, L. (2016). Modification of COMT-dependent pain sensitivity by psychological stress and sex. *PAIN*, 157(4), 858-867. PubMed Central ID Number: PMC4794347 [doi: 10.1097/j.pain.0000000000000449](https://doi.org/10.1097/j.pain.0000000000000449)
40. Knazovicky, D., **Helgeson, E. S.**, Case, B., Gruen, M. E., Maixner, W., Lascelles, B. Duncan X. (2016). Widespread somatosensory sensitivity in naturally occurring canine model of osteoarthritis. *PAIN*, 157(6), 1325-1332. PubMed Central ID Number: PMC4866583 [doi: 10.1097/j.pain.0000000000000521](https://doi.org/10.1097/j.pain.0000000000000521)
41. Bair, E., Ohrbach, R., Fillingim, R. B., Greenspan, J. D., Dubner, R., Diatchenko, L., **Helgeson, E.**, Knott, C., Maixner, W., Slade, G. D. (2013). Multivariable Modeling of Phenotypic Risk Factors for First-Onset TMD: The OPPERA Prospective Cohort Study. *Journal of Pain*, 14(12), T102-T115. PubMed Central ID Number: PMC4036699 [doi: 10.1016/j.jpain.2013.09.003](https://doi.org/10.1016/j.jpain.2013.09.003)
42. Shea, J., Kersten, G. J., Puccia, C. M., Stanton, A. T., Stiso, S. N., **Helgeson, E. S.**, Back, E. J. (2012). The use of parasites as indicators of ecosystem health as compared to insects in freshwater lakes of the Inland Northwest. *Ecological Indicators*, 13(1), 184-188. [doi: 10.1016/j.ecolind.2011.06.001](https://doi.org/10.1016/j.ecolind.2011.06.001)

Abstract

1. Smith, S., Bair, E., Slade, G., Ostrum, C., **Helgeson, E.**, Fillingim, R., Greenspan, J., Ohrbach, R., Dubner, R., Maixner, W., Diatchenko, L. (2015). *Female-specific effects of a serotonin 2A receptor (HTR2A) genetic variant on TMD pain and psychological phenotypes* 4th ed., vol. 16, S43-S43. *Journal of Pain*. [doi: 10.1016/j.jpain.2015.01.185](https://doi.org/10.1016/j.jpain.2015.01.185)

Conference Proceeding

1. MacDonald, D., Mkorombindo, T., Ling, S., Adabag, S., Casaburi, R., Connett, J., **Helgeson, E.**, Porszasz, J., Rossiter, H., Stringer, W., Zhao, D., Dransfield, M., Kunisaki, K. (2021). *Heart Rate Variability on 10-second ECG and Risk of Acute Exacerbations of COPD: a Secondary Analysis of BLOCK COPD* 4th ed., vol. 160, 1773A-1775A. CHEST. PubMed Central ID Number: PMC9166329 [doi: 10.1016/j.chest.2021.07.1615](https://doi.org/10.1016/j.chest.2021.07.1615)
2. Grande, J. P., **Helgeson, E. S.**, Leduc, R., Matas, A. J. (2019). *Correlation of Glomerular Size with Donor-recipient Factors and with Response to Injury* vol. 80, 210-210. *Human Immunology*. PubMed Central ID Number: PMC8166916

Refereed Letter to Editor

1. Albert, R. K., **Helgeson, E. S.** (2024). *Sigh Breaths in Patients With Trauma Receiving Mechanical Ventilation*. 10th ed., vol. 331, 887-888. *JAMA*. [doi: 10.1001/jama.2024.0117](https://doi.org/10.1001/jama.2024.0117)
2. Matas, A. J., Mannon, R. B., Rush, D., **Helgeson, E.** (2021). *Novel Phenotypes for Acute Kidney Transplant Rejection Using Semi-Supervised Clustering* 9th ed., vol. 32, 2387-2388. *Journal of the American Society of Nephrology*. PubMed Central ID Number: PMC8729828 [doi: 10.1681/ASN.2021040572](https://doi.org/10.1681/ASN.2021040572)
3. Matas, A. J., **Helgeson, E. S.** (2021). *The family voucher program: A 50-year simulation* 3rd ed., vol. 21, 1350-1351. *American Journal of Transplantation*. [doi: 10.1111/ajt.16344](https://doi.org/10.1111/ajt.16344)
4. Palzer, E. F., Vempati, S., **Helgeson, E. S.**, Matas, A. J. (2020). *Long-Term Living Kidney Donor Risk: A Web-Based Calculator* 12th ed., vol. 31, 2968-2969. *Journal of the American Society of Nephrology*. PubMed Central ID Number: PMC7790222 [doi: 10.1681/ASN.2020081238](https://doi.org/10.1681/ASN.2020081238)

5. Dransfield, M. T., **Helgeson, E. S.**, Connett, J. E. (2020). *Metoprolol for the Prevention of Exacerbations of COPD Reply* 14th ed., vol. 382, 1375-1376. The New England Journal of Medicine. [doi: 10.1056/NEJMc2000638](https://doi.org/10.1056/NEJMc2000638)

Software

1. **Helgeson, E. S. (Lead Author)**, Vock, D. M., Bair, E. (2020). *UNPaC: Non-Parametric Cluster Significance Testing with Reference to a Unimodal Null Distribution*. The Comprehensive R Archive Network. <https://CRAN.R-project.org/package=UNPaC>
2. **Helgeson, E. S. (Lead Author)**, Liu, Q., Kosorok, M., Bair, E. (2019). *SCBiclust: Identifies Mean, Variance, and Hierarchically Clustered Biclusters*. The Comprehensive R Archive Network. <https://CRAN.R-project.org/package=SCBiclust>

Website

1. Vempati, S. (Lead Author), Northrop, E., **Helgeson, E.**, Matas, A. J. (2020). *Living kidney donor risk assessment tool*. <https://shiny.biostat.umn.edu/Transplant/KidneyDonor/> [Non-Refereed]
2. Northrop, E. (Lead Author), **Helgeson, E. S.**, Vock, D. M., Evans, M., Chinnakotla, S., Matas, A. J. (2020). *Transplant risk and prediction models*. <https://shiny.biostat.umn.edu/Transplant/> [Non-Refereed]

Invited Presentations, Posters, and Exhibits

Underline - indicates student presenter

Presentation/Talk

1. **Helgeson, E. S.** "Recent Studies on Kidney Donor Characteristics and Outcomes," Division of Transplantation, University of Minnesota. (March 7, 2024). *Invited*.
2. **Helgeson, E. S.** "Evaluating Long-Term Risks of Living Kidney Donation," United States. (February 2023). *Invited*.
3. **Helgeson, E. S.** "Pregnancy Complications and Long-Term Living Donor Outcomes," Division of Transplantation, University of Minnesota, Minneapolis, Minnesota, United States. (November 2022). *Invited*.
4. **Helgeson, E. S., (Author & Presenter)** "Dimension reduction and feature selection methods: Reducing the complexity. Part 2: Lasso and Random Forest," Translational Science. (April 2021). *Invited*.
5. **Helgeson, E. S., (Author & Presenter)** "Machine Learning: An Overview (Part 1)," Department of Strategy and Management, NHH Norwegian School of Economics, Bergen, Norway. (March 2018). *Invited*.
6. **Helgeson, E. S., (Author & Presenter)** "Machine Learning: Examples and Current Practices (Part 2)," Department of Strategy and Management, NHH Norwegian School of Economics, Bergen, Norway. (March 2018). *Invited*.
7. **Helgeson, E. S., (Author & Presenter)**, Lascelles, B. Duncan X., (Author & Presenter) "Widespread Somatosensory Sensitivity in Naturally Occurring Model of Osteoarthritis," Center for Pain Research and Innovation Pain Seminar Series, Chapel Hill, North Carolina. (January 2016). *Invited*.
8. **Helgeson, E. S., (Author & Presenter)**, Remington, D., (Advisor) "Modeling Genetic and Environmental Influences on Resource Allocation traits of Arabidopsis Lyrata," Spokane

Regional Mathematics Colloquium, Spokane, Washington. (October 2011). *Invited.*

Presentations, Posters, and Exhibits

Underline - indicates student presenter

Poster

1. **Helgeson, E. S., Palzer, E., Vempati, S., Vock, D. M., Matas, A. J., "Using Shiny to Visualize a Kidney Donor's Personalized Long-Term Risk," R/Medicine Virtual Conference. (August 2021).**
2. Lin, A., **Helgeson, E. S.**, Treister, N. S., Schmidt, B. L., Patton, L. L., Elting, L. S., Lalla, R. V., Brennan, M. T., Sollecito, T. P., "The impact of head and neck cancer radiotherapy on salivary flow and quality of life: Results of the OraRad study," Astro Annual Meeting. (October 2020).
3. **Helgeson, E. S.**, Bair, E., "Nonparametric Cluster Significance Testing With Reference to a Unimodal Null Distribution," Women in Statistics and Data Science Conference, Charlotte, North Carolina. (October 2016).
4. **Helgeson, E. S.**, Bair, E., "Nonparametric Cluster Significance Testing Using a Unimodal Null Distribution," NSF Graduate Data Science Workshop, Seattle, Washington. (September 2016).
5. **Helgeson, E. S.**, Bair, E., "Nonparametric Cluster Significance Testing," NSF Graduate Data Science Workshop, Seattle, Washington. (August 2015).
6. **Helgeson, E. S.**, Bair, E., "Testing for the Presence of Clustering," Eastern North American Region/International Biometric Society, Miami, Florida. (March 2015).
7. **Helgeson, E. S.**, Remington, D., "Modeling Genetic and Environmental Influences on Resource Allocation traits of Arabidopsis lyrata," Joint Mathematics Meetings, Boston, Massachusetts. (January 2012).
8. Shea, J., Kersten, G., Puccia, C., Stanton, A., Stiso, S., **Helgeson, E. S.**, Back, E., "The Use of Parasites as Indicators of Biodiversity in Selected Lakes of the Inland Northwest," Murdock College Science Research Conference, Spokane, Washington. (October 2009).
9. Shea, J., Kersten, G., Puccia, C., Stanton, A., Stiso, S., **Helgeson, E. S.**, Back, E., "The Use of Parasites as Indicators of Biodiversity in Selected Lakes of the Inland Northwest," Natural Areas Conference, Vancouver, Washington. (September 2009).

Presentation/Talk

1. Deshpande, S. S., Yentzer, B. P., **Helgeson, E. S.**, Harnack, L. J., Chow, L. S., "Pilot Evaluation of Whether an Interviewer Administered Dietary Recall Method Augmented With a Photo-Based Mobile Food Record Improves Reporting of Food Intake," Nutrition, Boston, Massachusetts, United States. (July 2023).
2. Evans, M., **Helgeson, E. S.**, Rule, A., Vock, D. M., Matas, A. J. "Consequences of Low Estimated Glomerular Filtration Rate (eGFR) Pre- or Early Post Kidney Donation," American Transplant Congress, San Diego, California, United States. (June 2023).
3. Vock, D. M., **Helgeson, E. S.**, Matas, A. J., "Impact of Area Social Deprivation Index on Long-Term Living Kidney Donor Outcomes," American Transplant Congress, San Diego, California, United States. (June 2023).
4. Palzer, E. F., **Helgeson, E. S.**, Evans, M., Vock, D. M., Matas, A. J. "Post-Kidney Donation Pregnancy Complications and Long-Term Outcomes," American Transplant Congress, Boston, Massachusetts. (June 2022).

5. **Helgeson, E. S., Vempati, S., Palzer, E. F.,** Mjøen, G., Haugen, A. J., Matas, A. J., "Validation of a Hypertension Risk Calculator for Living Kidney Donors," American Transplant Congress, Boston, Massachusetts. (June 2022).
6. **MacDonald, D., Mkorombindo, T., Ling, S.,** Adabag, S., Casaburi, R., Connett, J. E., **Helgeson, E. S.,** Porszasz, J., Rossiter, H., Stringer, W., Zhao, D., Dransfield, M., Kunisaki, K. M., "Heart Rate Variability on 10-second ECG and Risk of Acute Exacerbations of COPD: a Secondary Analysis of BLOCK COPD," CHEST annual meeting. (October 2021).
7. **Helgeson, E. S., Palzer, E.,** Vock, D. M., Matas, A. J., "Pre-Kidney Donation Pregnancy Complications and Long-Term Outcomes," American Transplant Congress. (June 2021).
8. **Helgeson, E. S.,** Brown, M., Liang, H., Chaudhary, B., Lalla, R. V., Triester, N., Sollecito, T., Patton, L. L., Brennan, M. T., Schmidt, B. L., "Head and Neck Cancer Pain in a Multi-Center Longitudinal Cohort," AHSN International Conference on Head and Neck Cancer. (2020).
9. Brennan, M. T., Triester, N. T., Sollecito, T. P., Schmidt, B. L., Patton, L. L., **Helgeson, E. S.,** Lalla, R. V., "Dental caries change post-radiotherapy in head and neck cancer," IADR/AADR/CADR General Session & Exhibition. (2020).
10. **Helgeson, E. S.,** "Biclustering via feature weighted clustering," Joint Statistical Meetings. (August 2020).
11. **MacDonald, D., Helgeson, E. S.,** Dransfield, M., Adabag, S., Casaburi, R., Connett, J. E., Voelker, H., Kunisaki, K. M., "Blunted Chronotropic Reserve and Acute Exacerbations of COPD: A Secondary Analysis of the BLOCK Trial," American Thoracic Society Conference. (May 2020).
12. Kaminsky, D. A., **Helgeson, E. S.,** Voelker, H., Fortis, S., Connett, J. E., Lazarus, S., Dransfield, M. T. "Differential Effects of Metoprolol on Symptoms, Exercise Tolerance and Exacerbations Based on Baseline Bronchodilator Response Among Participants in the Beta-Blockers for the Prevention of Acute Exacerbations of COPD Trial," American Thoracic Society International Conference. (May 2020).
13. Brennan, M., Triester, N., Sollecito, T., Schmidt, B., Patton, L., **Helgeson, E. S.,** Hodges, J. S., "Dental Caries Change Post-radiotherapy in Head and Neck Cancer," IADR/AADR/CADR General Session. (March 2020).
14. Grande, J. P., **Helgeson, E. S.,** Leduc, R. E., Hunsicker, L., "Correlation of Glomerular Size with Donor-Recipient Factors and Response to Injury," Banff Foundation for Allograft Pathology, Pittsburgh, Pennsylvania. (September 2019).
15. Kroon, E., de Souza, M., Chottanapund, S., Anderson, J., Manasnayakorn, S., Jorstad, S., David, C., Connor, A., **Helgeson, E. S.,** Reilly, C. S., Robb, M., Douek, D., Ananworanich, J., Schacker, T. W., "Persistent Detection of HIV RNA+ Cells with ART Started in Fiebig 1&2 vs. 3-5.," Conference on Retroviruses and Opportunistic Infections, Boston, Massachusetts. (March 2018).
16. Lager, J., **Helgeson, E. S.,** "Development of an Enhanced Recovery after Surgery (ERAS) Pathway in Benign Gynecology," Palm Springs, California. (November 2017).
17. **Helgeson, E. S.,** Bair, E., "Non-parametric Cluster Significance Testing With Reference to a Unimodal Null Distribution," Eastern North American Region/International Biometric Society, Washington, District of Columbia. (March 2017).

18. **Helgeson, E. S.**, Bair, E., "Methodology for determining optimal questionnaire length in the OPPERA study," Eastern North American Region/International Biometric Society, Orlando, Florida. (March 2013).
19. **Helgeson, E. S.**, Remington, D., "Modeling Genetic and Environmental Influences on Resource Allocation traits of Arabidopsis lyrata," Emerging Researchers National Conference in STEM, Atlanta, Georgia. (February 2012).

TEACHING

Scheduled Teaching

PubH 7430: Stat Mthds for Correlated Data Fall 2017, Fall 2019, Fall 2021, Fall 2023

Instructional Activity

University of Minnesota

Guest Lecturer

PubH 6451: Biostatistics II Lecture Topic: Multiple Linear Regression	2023
PubH 8403: Research Skills in Biostatistics Lecture Topic: Professional Ethics	2021
PubH 8403: Research Skills in Biostatistics Lecture Topic: International collaborations	2020
PubH 8403: Research Skills in Biostatistics Lecture Topic: Effective poster presentations	2019
PubH 8403: Research Skills in Biostatistics Lecture Topic: Effective poster presentations	2018
PubH 4410: Summer Institute in Biostatistics (SIBS) Lecture Topic: Statistical Learning Applied to the OPPERA Study	2018
PubH 8403: Research Skills in Biostatistics Lecture Topic: Working with clinical and other non-biostatistical investigators.	2017

University of North Carolina

Instructor, Principles of Statistical Inference: BIOS 600, University of North Carolina, 22 participants	2015
Teaching Assistant, Biostatistics for Laboratory Scientists: BIOS 610, University of North Carolina	2013

PROFESSIONAL DEVELOPMENT ACTIVITIES

University Teaching/Learning Program, "Training Initiatives in Biomedical and Biological Sciences Teaching Certificate," University of North Carolina	2015
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ADVISING AND MENTORING

Graduate Student Activities

Advisees

Jiayu Lin, Public Health Data Sci MPH	2023 - Present
Jiaying Dong, Biostatistics MS	2023 - Present
Nicholas Musinguzi, Biostatistics PhD	2023 - Present
Louis Losbanos, Bioinform & Comp Biol MS	2023 - Present
Benjamin Pedersen, Biostatistics MS	2022 - Present
You-Shan Shen, Biostatistics MS	2021 - 2023
Kate Bruncati, Biostatistics PhD	2022 - 2023
Linnea York, Biostatistics MS	2021 - 2022
Ajing Huang, Biostatistics MS	2018 - 2022
Guangyou Li, Biostatistics MS	2019 - 2021
Katrina Harper, Biostatistics MS	2020
Karl Brown, Biostatistics MS	2020
Tushar Patni, Biostatistics MS	2019
Shruti Vempati, Biostatistics MS	2019

Other Advising Activities

University of Minnesota

Supervised Research Assistants

Caleb Griffiths	2023-Present
Sydney Benson-Porter	2023 - 2024
Samira Deshpande	2022 - 2023
Jennifer Proper	2021 - 2023
Sharon Ling	2020 - 2021

Committee Advising

Doctoral Final Committee: Committee Chair

Jennifer Proper, Biostatistics PhD <i>Thesis: Bayesian Methods for Response-Adaptive Randomization and Drug Repurposing</i>	2022
Grace Lyden, Biostatistics PhD <i>Thesis: Policy-relevant causal effect estimators for heterogeneous treatments and exposures</i>	2021
Shannon McKearnan, Biostatistics PhD <i>Thesis: Statistical Methods for Organ Transplant</i>	2021

Doctoral Final Committee: Committee Member

Roland Brown, Biostatistics PhD	2019 - 2020
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Thesis: A Statistical Framework for Harnessing Human Activity Data to Understand Behavior, Health, and Well-Being

Doctoral Final Committee: Committee Reviewer

Sara Lammert, Epidemiology PhD	2023
<i>Thesis: Evaluation of the Facilitators and Barriers to Achieving Targets on the HIV Continuum of Care</i>	
Saeun Park, Epidemiology PhD	2023 - Present
<i>Thesis: Assessing the impact of the COVID-19 pandemic on mental health of primary caregivers and children and its association with child neurodevelopment</i>	
Andy Becker, Biostatistics PhD	2022
<i>Thesis: Clustering Methods for Correlated Data</i>	
Anna Stadelman, Epidemiology PhD	2020 - 2021
<i>Thesis: Development and validation of a clinical prediction tool for the diagnosis of tuberculous meningitis</i>	
Ashwin Karanam, Exp & Clin Pharmacology PhD	2020
<i>Thesis: Quantitative Pharmacological Approaches for Characterizing Lamotrigine Pharmacokinetics in Special Populations of Pregnancy, Postpartum and Breastfeeding Infants to Prospectively Optimize Dosing</i>	

Doctoral Preliminary Committee: Committee Member

Jennifer Proper, Biostatistics PhD	2021 - 2022
<i>Thesis: Bayesian Methods for Response-Adaptive Randomization and Drug Repurposing</i>	
Jessica Barry, Exp & Clin Pharmacology PhD	2022 - Present
Andy Becker, Biostatistics PhD	2021 - 2022
<i>Thesis: Clustering Methods for Correlated Data</i>	
Trang Dang, Social/Admin Pharm PhD	2022 - Present
<i>Thesis: Racial Disparities in Clinical and Economic Outcomes of Metastatic Non-Small Cell Lung Cancer Patients Receiving First-Line Immunotherapy in the United States</i>	
Grace Lyden, Biostatistics PhD	2020 - 2021
<i>Thesis: Policy-relevant causal effect estimators for heterogeneous treatments and exposures</i>	
Saeun Park, Epidemiology PhD	2021 - Present
<i>Thesis: Assessing the impact of the COVID-19 pandemic on mental health of primary caregivers and children and its association with child neurodevelopment</i>	
Shannon McKearnan, Biostatistics PhD	2020 - 2021
<i>Thesis: Statistical Methods for Organ Transplant</i>	
Anna Stadelman, Epidemiology PhD	2019 - 2021
<i>Thesis: Development and validation of a clinical prediction</i>	

<i>tool for the diagnosis of tuberculous meningitis</i>	
Ashwin Karanam, Exp & Clin Pharmacology PhD	2018 - 2020
<i>Thesis: Quantitative Pharmacological Approaches for Characterizing Lamotrigine Pharmacokinetics in Special Populations of Pregnancy, Postpartum and Breastfeeding Infants to Prospectively Optimize Dosing</i>	
Roland Brown, Biostatistics PhD	2018 - 2020
<i>Thesis: A Statistical Framework for Harnessing Human Activity Data to Understand Behavior, Health, and Well-Being</i>	
Master's Thesis/Research Committee: Committee Chair	
Samira Shridhar Deshpande, Biostatistics MS	2023
<i>Thesis: Comparing Euclidean and Dynamic Time Warping Distances to Identify Subgroups Of Healthy Individuals Using Continuous Glucose Monitoring Data</i>	
Katrina Harper, Biostatistics MS	2020
<i>Thesis: Clustering Methods for Single-Cell RNA-Sequencing Data</i>	
Karl Brown, Biostatistics MS	2020
<i>Thesis: Comparing Clustering Algorithms to Categorize Groups of Individuals with Autism Spectrum Disorder in Vocational Rehabilitation Programs</i>	
Tushar Patni, Biostatistics MS	2019
<i>Thesis: Comparing Levenshtein and Euclidean Distances for Clustering Time Use Data</i>	
Shruti Vempati, Biostatistics MS	2019
<i>Thesis: A Comparison of Prediction Methods for Hypertension and Type 2 Diabetes in Living Kidney Donors</i>	
Master's Thesis/Research Committee: Committee Member	
You-Shan Shen, Biostatistics MS	2023
Linnea York, Biostatistics MS	2022
Guangyou Li, Biostatistics MS	2021
Matthew Kucera, Biostatistics MS	2020
Jingzhe Wang, Statistics MS	2019
Siyang Ren, Biostatistics MS	2019
Xuan Bi, Data Science MS	2019
Akash Kulkarni, Computer Science MS	2019
Nicholas Drysdale, Epidemiology MPH	2018
Vaishnavi Soundararajan, Exp & Clin Pharmacology MS	2018
Yan Li, Biostatistics MS	2018
Yuezhi Xu, Statistics MS	2018

MENTORING/CAREER ADVISING

Jacob Kohlenberg, Assistant Professor of Medicine, Division of Diabetes, Endocrinology and Metabolism April 2023 - Present
 Biostatistics mentor for NIH K12 DiabDocs award entitled "Personalized Preventive Strategies to Reduce the Frequency and Morbidity of Diabetic Ketoacidosis in People with Type 1 Diabetes Mellitus."

SERVICE

Service to the Discipline/Profession/Interdisciplinary Area(s)

Ad Hoc Reviewer for:

Methods of Information in Medicine
 Biometrics
 Biostatistics

Grant Reviewer

National Institutes of Health May 2021 - Present
 Served on five panels
 National Science Foundation December 2017 - Present
 Served on three panels

Member

Analytic Methods Subcommittee of the Scientific Registry of Transplant Recipients Review Committee 2022 - Present
 Data Safety and Monitoring Board for "Suicide Prevention for Patients with Chronic Pain." NIH NIMH R56MH121555; PI: Lisa McAndrew (University at Albany) 2020 - Present

Organizer

Artificial Intelligence and Data Driven Decision Making in Transplantation Session, American Transplant Congress, San Diego, California 2023
Role: Session organizer and moderator

Reviewer

Eastern North American Region International Biometric Society 2019
Role: Poster judge

Service to the University/College/Department

University of Minnesota

Chair, Diversity, Equity, and Inclusion Committee 2023 - Present
 Chair, MS/MPH Admissions Committee 2022 - 2023
 Member, Contract Assistant Professor Search Committee 2020 - 2021
 Member, Diversity, Climate, and Inclusion Committee 2019 - 2023
 Member, Admissions Committee 2018 - 2022
 Speaker at UMN School of Public Health Student Orientation 2018

Reviewer, Student Research Day <i>Role: Poster judge</i>	2018
Member, Coordinating Centers for Biometric Research	2017 - Present
Member, Curriculum Committee	2017 - 2018