Amin Bemanian, MD PhD

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EDUCATION

Aug 2013 – May 2020 **Doctor of Medicine**
Medical Scientist Training Program, Medical College of Wisconsin
Milwaukee, WI

Aug 2013 – Sep 2018 **Doctor of Philosophy, Public and Community Health**
Medical Scientist Training Program, Medical College of Wisconsin
Milwaukee, WI

Sep 2010 – May 2013 **Bachelor of Science and Engineering, Biomedical Engineering**
Washington University in St. Louis *Magna Cum Laude*
Minors: Computer Science; Public Health
St. Louis, MO

CLINICAL TRAINING

Jul 2023 – Jun 2026 **Pediatric Infectious Disease Fellowship**
University of Washington / Seattle Children's Hospital, Seattle, WA

Jul 2020 – Jun 2023 **Pediatric Residency, Research Track**
University of Washington / Seattle Children's Hospital, Seattle, WA

RESEARCH EXPERIENCE

Jan 2024 – present **Spatial and Social Patterns of SARS-CoV-2 Transmission**
Fred Hutchinson Cancer Center / University of Washington, Seattle, WA
Mentors: Trevor Bedford, PhD; Joshua T. Schiffer, MD, MSc

Identified SARS-CoV-2 transmission patterns using pairs of identical pathogen sequences from the US, Canada, and Mexico. Inferred transmission relationships between states and provinces over the course of the pandemic and compared against travel and mobility data to identify geospatial predictors of spread.

Jul 2021 – Jul 2024 **Pediatric COVID-19 Vaccine Accessibility**
University of Washington / Institute for Health Metrics and Evaluation, Seattle, WA
Mentor: Jonathan F. Mosser, MD, MPH

Modeled automobile and transit accessibility to COVID-19 vaccination sites in King County. Assessed the relationship between vaccine accessibility and uptake, including effect modification by neighborhood socioeconomic factors.

Mar 2020 – Jun 2020 **COVID-19 Spatiotemporal Epidemiology Team**
Medical College of Wisconsin / Milwaukee County Health Department
Project Leads: K.M.M. Beyer, PhD; M. O'Brien, PhD; D. Rausch, MS

Developed a standardized daily COVID-19 report for MCW leadership and Milwaukee County stakeholders (incidence, R_t, percent positivity). Built a compartmental model for projecting COVID-19 healthcare utilization.

Jun 2016 – Jun 2020 **Liver Cancer Dissertation Research**

Medical College of Wisconsin, Milwaukee, WI
Mentor: Kirsten M.M. Beyer, PhD, MPH, MS
Committee: P.W. Laud, PhD; L.D. Cassidy, MS PhD; R. Fraser, PhD; K. Saeian, MD

(1) Developed a novel small-area measure of racial residential segregation. (2) Mapped liver cancer mortality in Wisconsin and assessed associations with segregation and environmental risk factors. (3) Retrospective cohort study of liver disease patients examining neighborhood segregation as a risk factor for liver cancer.

Jun 2016 – Jul 2017 **Racial Segregation, HMDA Index, and Cancer Disparities**
Medical College of Wisconsin, Milwaukee, WI
PI: Kirsten M.M. Beyer, PhD, MPH, MS

Developed a racial discrimination index from Home Mortgage Disclosure Act data. Calculated segregation indices across major US metropolitan areas and assessed associations with breast and colorectal cancer survival disparities.

Mar 2010 – May 2013 **Undergraduate Research Assistant**
Center for Genome Sciences, Washington University in St. Louis
Mentor: Michael R. Brent, PhD

Modeled glucose transport transcriptional networks in *S. cerevisiae* using MATLAB differential equations and linear optimization. Conducted experiments on hexose transporter expression dynamics.

GRANTS AWARDED

Feb 2018 – May 2020 **NCI F30 Individual Fellowship: 5F30CA216947-01A1**
"Racial Disparities of Liver Cancer Mortality in Wisconsin"
National Cancer Institute, National Institutes of Health

Jul 2017 – Feb 2018 **MCW CTSI TL1 Research Training Award: 5TL1TR001437-03**
Clinical and Translational Science Institute, Medical College of Wisconsin

PUBLICATIONS AND PRESENTATIONS

Journal Articles

1. **Bemanian A** & Mosser JF. (2024). Investigating the spatial accessibility and coverage of the pediatric COVID-19 vaccine: An ecologic study of regional health data. *Vaccines*, 12(5), 545.
2. Canales B, Laud PW, Tarima S, Zhou Y, Bikomeye JC, McGinley EC, Yen TWF, **Bemanian A**, Beyer KMM. (2023). Isolation and survival: The impact of local and MSA isolation on survival among non-Hispanic Black women diagnosed with breast cancer in the United States using a SEER-Medicare cohort. *Health & Place*, 83, 103090.
3. **Bemanian A**. (2021). Confronting racism from patients. *Narrative Inquiry in Bioethics*, 11(3), 254–256.
4. **Bemanian A**, Cassidy LD, Fraser R, Laud PW, Saeian K, Beyer KMM. (2021). Ecologic study of variability in relationship between liver cancer mortality and racial residential segregation. *International Journal of Environmental Research and Public Health*, 18(18), 9732.
5. **Bemanian A**, Ahn KW, O'Brien M, Rausch DJ, Weston B, Beyer KMM. (2020). Investigating the trajectory of the COVID-19 outbreak in Milwaukee County and projected effects of relaxed distancing. *Wisconsin Medical Journal*, 119(2), 84–90.

6. **Bemanian A**, Cassidy LD, Fraser R, Laud PW, Saeian K, Beyer KMM. (2019). Racial disparities of liver cancer mortality in Wisconsin. *Cancer Causes & Control*, 30, 1277–1282.
7. **Bemanian A** & Beyer KMM. (2017). Measures matter: The local exposure/isolation (LEx/Is) metric and relationships between local-level segregation and breast cancer survival. *Cancer Epidemiology, Biomarkers & Prevention*, 26(4), 516–524.
8. Zhou Y, **Bemanian A**, Beyer KMM. (2017). Housing discrimination, residential racial segregation, and colorectal cancer survival in southeastern Wisconsin. *Cancer Epidemiology, Biomarkers & Prevention*, 26(4), 561–568.
9. Beyer KMM, Zhou Y, Matthews K, **Bemanian A**, Laud PW, Nattinger AB. (2016). New spatially continuous indices of redlining and racial bias in mortgage lending: links to survival after breast cancer diagnosis and implications for health disparities research. *Health & Place*, 40(1), 34–43.
10. Beyer KMM, Zhou Y, Matthews K, Hoormann K, **Bemanian A**, Laud PW, Nattinger AB. (2016). Breast and colorectal cancer survival disparities in southeastern Wisconsin. *Wisconsin Medical Journal*, 115(1), 17–22.
11. Cohen KE, Scanlon MC, **Bemanian A**, Schindler CA. (2017). Pediatric skin failure. *American Journal of Critical Care*, 25(4), 320–328.

Book Chapters

1. Beyer KMM, Young S, **Bemanian A**. (2019). Persistent racial disparities in breast cancer mortality between Black and White women: What is the role for structural racism? In Beyer KMM, Tiwari RC, Foltz JL (Eds.), *Geospatial Approaches to Energy Balance and Breast Cancer* (pp. 361–378). Springer, Cham.

Research Presentations and Conference Abstracts

1. **Bemanian A**, Tran-Kiem C, Bedford T. (2025). Inferring national and regional patterns of SARS-CoV-2 spread across North America from 5.7 million genome sequences. *EPIDEMICS*. San Diego, CA. [Oral]
2. **Bemanian A**, Mosser J. (2024). Investigating the relationship between COVID-19 vaccine accessibility and coverage in Seattle and King County. *IDWeek*. Los Angeles, CA. [Oral]
3. **Bemanian A**, Mosser J. (2022). Differences in transportation access to medical visits. *APHA National Meeting*. Boston, MA. [Oral]
4. **Bemanian A**, Saeian K, Cassidy LD, Beyer KMM. (2019). Investigating biomedical pathways mediating racial and socioeconomic disparities of liver cancer. *The Liver Meeting (AASLD)*. Boston, MA. [Poster]
5. **Bemanian A**, Saeian K, Cassidy LD, Fraser R, Laud PW, Beyer KMM. (2019). Survival differences in liver cancer due to patient race and racial residential segregation. *International Liver Cancer Association 13th Annual Conference*. Chicago, IL. [Platform]
6. **Bemanian A** & Beyer KMM. (2019). Racial residential segregation and liver cancer outcomes. *Clinical Translational Science Institute of Southeast Wisconsin*. Milwaukee, WI. [Invited Talk]
7. **Bemanian A** & Beyer KMM. (2017). Spatial relationship between racial residential segregation and liver cancer mortality. *International Medical Geography Symposium*. Angers, France. [Poster]
8. **Bemanian A** & Beyer KMM. (2017). Spatial relationship between racial residential segregation and liver cancer mortality. *Milwaukee Regional Research Forum*. Milwaukee, WI. [Poster]
9. **Bemanian A**, Zhou Y, Beyer KMM. (2016). Breast cancer and local residential segregation in the Milwaukee metropolitan area. *144th APHA Annual Meeting & Exposition*. Denver, CO. [Poster]
10. **Bemanian A**, Zhou Y, Beyer KMM. (2016). Effects of residential racial segregation on racial dis-

parities in colorectal cancer survival and late-stage diagnosis. *Conference on Geospatial Approaches to Cancer Control and Population Sciences.* Bethesda, MD. [Poster]

11. **Bemanian A** & Beyer KMM. (2015). Quantification of segregation in southeastern Wisconsin as a marker for economic disadvantage. *143rd APHA Annual Meeting and Exposition.* Chicago, IL. [Poster]

Invited Lectures

1. **Bemanian A**. (2026). "O Leukocyte Where Art Thou: Pancytopenia in Setting of Infection." Virtual Case Conference in the Immunocompromised Child (vCCC) series, Pediatric Infectious Disease Society (PIDS). [National, Virtual; forthcoming]

TEACHING EXPERIENCE

Jul 2023 – Jun 2026 **Infectious Disease Case Conference**
Department of Pediatrics, UW / Seattle Children's Hospital
Organized bi-weekly case presentations to the division; delivered additional didactic lectures throughout the year.

Jul 2023 – Jun 2025 **Residency Morning Report**
University of Washington Pediatrics Residency Program
Presented teaching cases; provided clinical pearls and bedside teaching.

Jul 2021 – Jun 2022 **Residency Case Crunch, Noon Conference**
University of Washington Pediatrics Residency Program
Clinical case presentations for interns and residents on core pediatric topics.

SERVICE AND LEADERSHIP

Jan 2024 – present **IDEA Committee**
Division of Pediatric Infectious Diseases, UW / Seattle Children's Hospital
Developed equity presentations for the division; provided feedback on inclusive fellowship recruitment practices.

Jan 2022 – Apr 2022 **Health Equity Rounds Lead — COVID-19 and Anti-Asian Racism**
Seattle Children's Hospital
Led development and delivery of multidisciplinary lecture on COVID-19 impact on Asian American health and anti-Asian racism.

Jun 2020 – Jun 2023 **Diversity Committee (DComm)**
University of Washington Pediatrics Residency Program
Promoted diversity in residency recruitment, incorporated equity into the teaching curriculum, and organized community events.

Aug 2013 – Jun 2020 **Asian Pacific American Medical Students Association (APAMSA)**
Medical College of Wisconsin, Milwaukee, WI

- **Chapter Co-President** (Aug 2014 – May 2015): Managed events and finances; wrote grant requests. Chapter of the Year award recipient.
- **Neighborhood House Fair Coordinator** (Feb 2014, 2015): Organized multi-partner community health fair on Milwaukee's North Side.
- **Hmong Health Education Program** (Aug 2013 – May 2015): Blood pressure screening, Hmong-language radio health education, and mentorship of high school students toward pre-medicine pathways.
- **National Diversity Committee** (Nov 2017 – May 2018): Expanded

APAMSA's representation of South Asian, Pacific Islander, and LGBTQ APIAs.

- **Resolution Committee** (Fall 2018): Drafted resolutions for the 2018 APAMSA National Meeting.

ACADEMIC AWARDS AND SCHOLARSHIPS

2018	Graduate Student Award Winner, MCW 27th Annual Graduate School Poster Session
2015	2nd Place, American Public Health Association Codeathon, 143rd APHA National Conference
2010 – 2013	Named Scholarship in Engineering, Washington University in St. Louis
2012	Outstanding Student Award in Computer Science and Engineering, Washington University in St. Louis
2010 – 2013	Dean's List, Washington University in St. Louis (7 semesters)

PROFESSIONAL SOCIETIES

- Pediatric Infectious Disease Society
- Infectious Disease Society of America
- American Academy of Pediatrics

SPECIAL SKILLS

Languages: Native English; Native Persian (spoken), basic reading and writing

Programming: R (primary), Python; experience in MATLAB, Java, SAS, Stata, JAGS; comfortable in Windows, Unix, and macOS