# Adam J Sullivan

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## Education

| | |
|---|---|
| 2015 | Ph.D., Biostatistics, Harvard University |
| | Dissertation: Sensitivity Analysis for Linear Structural Equation Models, Longitudinal Mediation with Latent Growth Models and Blended Learning in Biostatistics Education |
| | Advisor: Tyler VanderWeele |
| 2010 | M.Sc., Mathematics, South Dakota State University |
| 2003 | B.Sc., Mathematics and Adolescent Education, Houghton College |

## Appointments

| | |
|---|---|
| 2015–pres. | Assistant Professor of Biostatistics, Brown University School of Public Health |
| 2016–pres. | Biostatistics Masters Programs Director, Brown University School of Public Health |
| 2016–pres. | Faculty Statistician, Hassenfeld Child Health Innovation Institute, Brown University |

## Selected Honours and Awards

| | |
|---|---|
| 2018 | Dean's Award for Excellence in Teaching, Brown University |
| 2017–2018 | Sheridan Junior Faculty Teaching Fellow, Brown University |
| 2017 | Teaching with Technology Award: Showcase Award, Brown University |
| 2016 | Dean's Award for Excellence in Classroom Instruction, Brown University School of Public Health |

## Consulting

2011–pres.    Fellow, Initiative on Health,Religion and Spirituality, Boston, MA.

2011-pres.    Consulting Statistician, Dr. Tracy Balboni, Boston, MA.

2009    Statistics Intern, AVERA Research Institute, Sioux Falls, SD.

## Other Professional Positions

2004–2005    Mathematics Teacher, Marion Jr/Sr High School, Marion, NY

2005–2007    Mathematics and Physics Teacher, Sherman Central School District, Sherman, NY.

## Membership in Professional Societies

2015–pres.    American Statistical Association

2017–pres.    Irish Statistical Association

## Publications

### Peer Reviewed

[1] Werner, E.F. and Has, P. and Kanno, L. and **Sullivan, A.** and Clark, M.A. (2018) Barriers to Postpartum Glucose Testing in Women with Gestational Diabetes Mellitus. American Journal of Perinatology. [DOI] [PMID 30060291]

[2] Balboni, M.J. , **Sullivan, A.J.**, Smith, P.T., Zaidi, D., Mitchell, C., Tulsky, J.A., Sulmasy, D., VanderWeele, T.J., Balboni, T.A. (2017) The Views of Clergy Regarding Ethical Controversies in Care at the End of Life. Journal of Pain and Symptom Management. [DOI] [PMID 28818632]

[3] Balboni, M. , **Sullivan, A.J.** , Enzinger, A. , Smith, P. , Mitchell, C., Peteet, J., Tulsky, J., Vanderweele, T.J., Balboni, T.A. (2017) United States Clergy Religious Values and Relationships to End-of-Life Discussions and Care. Journal of Pain and Symptom Management. [DOI] [PMID 28185893]

[4] Epstein-Peterson, Z.D., **Sullivan, A.J.** , Krishnan, M. , Chen, J. Ferrone, M., Baldini, E., Balboni, T.A. (2015) Post-operative Radiation Therapy for Osseous Metastasis: Outcomes and Predictors of Local Failure. Practical Radiation Oncology. [DOI] PMID 25858770]

[5] Epstein-Peterson, Z.D., **Sullivan, A.J.** , Enzinger, A.C., Trevino, K.M., Zolfrank, A.A., Balboni, M.J., VanderWeele, T.J., Balboni, T.A. (2014) Examining Forms of Spiritual Care Provided in the Advanced Cancer Setting. American Journal of Hospice and Palliative Medicine. [DOI] [PMID 25005589] [PMCID 4436038]

[6] Balboni, M.J., **Sullivan, A.**, Enzinger, A.C., Epstein-Petersen, Z., Tseng, Y., Mitchell, C., Niska, B.A., Zollfrank, A., VanderWeele, T.J., and Balboni, T.A. (2014) Nurse and Physician Barriers to Spiritual Care Provision at the End of Life. Journal of Pain and Symptom Management. [DOI] [PMID 24480531] [PMCID 4569089]

[7] Tseng, Y.D., Kishan, M.S., **Sullivan, A.J.**, Jones, J.A., Chow, E. and Balboni, T.A. (2013) How Radiation Oncologists Evaluate and Incorporate Life Expectancy Estimates Into the Treatment of Palliative Cancer Patients: A Survey-Based Study. International Journal of Radiation Oncology* Biology* Physics. [DOI] [PMID 24074920] [PMCID 4435719]

[8] Tseng, Y.D., Kishan, M.S., Jones, J.A., Sullivan, A.J. , Gorman, D. , Taylor, A. , Pacold, M., Kalinowski, B. , Mamon, H.J., Abrahm, J. and Balboni, T.A. (2013) Supportive and palliative radiation oncology service: Impact of a dedicated service on palliative cancer care Practical Radiation Oncology. [DOI] [PMCID 4617676]

[9] Balboni, M.J., **Sullivan, A.**, Amobi, A., Phelps, A.C., Gorman, D., Zollfrank, A., Peteet, J.R., Prigerson, H.G., VanderWeele, T.J. and Balboni, T.A. (2013) Why is spiritual care infrequent at the end of life? Spiritual care perceptions among patients, nurses, and physicians and the role of training. Journal of Clinical Oncology. [DOI] [PMID 23248245] [ PMCID 4878036]

**Online Learning Materials**

[1] Hall, M., Saldhana, I. , **Sullivan, A.J.**, Langberg, V., Springs, S., Wallack, A., Trikalinos, T., Balk, E., Lau, J., Schmid, C. (2018) Assess Risk of Bias. EvSynth Academy. [Website]

[2] Hall, M., **Sullivan, A.J.**, Langberg, V., Springs, S., Wallack, A., Trikalinos, T., Balk, E., Lau, J., Schmid, C. (2018) Report Your Findings. EvSynth Academy. [Website]

[3] Hall, M., **Sullivan, A.J.**, Langberg, V., Springs, S., Wallack, A., Trikalinos, T., Balk, E., Lau, J., Schmid, C. (2018) Extract Data. EvSynth Academy. ://evsynthacademy.org/index.php/course/extract-data/[Website]

[4] Hall, M., **Sullivan, A.J.**, Langberg, V., Springs, S., Wallack, A., Trikalinos, T., Balk, E., Lau, J., Schmid, C. (2017) Search and Screen Your Studies. EvSynth Academy. [Website]

[5] Hall, M., **Sullivan, A.J.**, Langberg, V., Springs, S., Wallack, A., Trikalinos, T., Balk, E., Lau, J., Schmid, C. (2017) Developing Your Question. EvSynth Academy. [Website]

[6] Hall, M., **Sullivan, A.J.**, Langberg, V., Springs, S., Wallack, A., Trikalinos, T., Balk, E., Lau, J., Schmid, C. (2017) Prepare Your Topic. EvSynth Academy. [Website]

[7] Hall, M., **Sullivan, A.J.**, Langberg, V., Springs, S., Wallack, A., Trikalinos, T., Balk, E., Lau, J., Schmid, C. (2017) Introduction to Evidence Synthesis. EvSynth Academy. [Website]

[8] **Sullivan, A.J.** (2016) Introduction to R. Statistics Education. [Website]

**Books**

[1] **Sullivan, A.J.** (2018) R Companion for Statistics for Social Science. Top Hat Monocle. Book Website

[2] Leonard, K.L., **Sullivan, A.J.** (2018) Biostatistics for Oncologists. Springer Publishing Company.

Hayward, S., Bailey, S.L., Hauselt, J., Kampen, K., Neely, M.L., Carroll, D., **Sullivan, A.J.**, Cullum, A.J. (2016) Statistics for Social Science: A top Hat Interactive Text. Top Hat Monocle. Book Website

**Invited Conferences and Presentations**

[1] Careers in Biostatistics/Statistics Panel Member. November 2018, Haverford College, Haverford, PA.

[2] Making the Case for Using a Simple and Modifiable Neighborhood Risk Index. October 2018, Holy Cross University, Worcester, MA.

[3] Utilizing Free Resources to Advance Students Programming for Data Science Skills: Github Classroom. Electronic Conference on Teaching Statistics, May 2018, Online Tech Talk.

[4] Utilizing Free Resources to Advance Students Programming for Data Science Skills: Data Camp. Electronic Conference on Teaching Statistics, May 2018, Online Poster Presentation.

[5] Flipping Classrooms!, Teaching Training Program, February 27, 2018. Harvard School of Public Health, Boston, MA.

[6] Why Statistics in the World of Data Science?, Mathematics and Statistics Department, November, 2017. Mt. Holyoke College, Massachusetts.

[7] Statistics and the Emerging Discipline of Data Science, United States Conference on Teaching Statistics, May, 2017. Penn State, Pennsylvania.

[8] The Results of Blended Instruction in Quantitative Methods in Public Health: A Pilot Study, Joint Statistical Meetings, August, 2016, Chicago, IL.

[9] Panel Member on: Teaching a Flipped or Blended Class. Electronic Conference On Teaching Statistics, May, 2016, Online.

[10] What I wish I had known when I flipped a course! Electronic Conference On Teaching Statistics, May, 2016, Online.

[11] The Results of Blended Instruction in Quantitative Methods in Public Health: A Pilot Study. Brown University. February, 2015. Providence, RI.

[12] Sensitivity Analysis for Linear Structural Equation models. College of William and Mary. March, 2015. Williamsburg, VA.

[13] Sensitivity Analysis for Linear Structural Equation models. Clarkson University. February, 2015. Postdam, NY.

**Short Courses**

[1] Introduction to R Programming for Biostatistics Data Management, Regression Modeling and Survival Analysis, NAMBARI 4th Workshop on Advanced Biostatistical Methods. AMPATH / Moi University School of Medicine. June 19-22, 2017. Eldoret, Kenya. [WEBSITE]

## Professional Service

- Reviewer, Hawkes Learning, 2017
- Reviewer, Journal of General Internal Medicine, 2015-2017.
- Reviewer, Cengage, 2016.

## Department, School and University Service

2018–Pres.    School of Public Health Strategic Planning Steering Committee

2018–pres.    School of Public Health Master's Strategic Working Group

2016–pres.    Director of Biostatistics Masters Admissions Committee

2016–pres.    Co-Director of Biostatistics Academic Priorities Committee

2016–2018    School of Public Health Diversity Committee

2016–pres.    Biostatistics Department Diversity Committee

2016–pres.    Department of Biostatistics Administrative Committee

2016–pres.    MPH Curriculum Committee

2016–2018    School of Public Health Curriculum Committee

2015–pres.    Graduate Studies Committee

2015-2016    Department of Biostatistics Academic Priorities Committee

2015-2016    Department of Biostatistics Masters Admissions Committee Member

# Teaching

## A. Courses

†= Designed New Course
§= Substantial Revision / Redesign

| Semester | Course | Enrollment | Title |
|---|---|---|---|
| Sum 2014 | ID 200 | 15 | †Principles of Biostatistics and Epidemiology |
| FA 2015 | PHP 2515 | 17 | †Fundamentals of Probability and Statistical Inference |
| SP 2016 | PHP 2560 | 18 | †Statistical Computing |
| SP 2016 | PHP 2511 | 58 | Applied Regression Analysis |
| FA 2016 | PHP 2515 | 16 | Fundamentals of Probability and Statistical Inference |
| FA 2016 | PHP 2560 | 29 | §Statistical Programming with R |
| SP 2017 | PHP 2511 | 31 | §Applied Regression Analysis |
| SP 2017 | PHP 2560 | 8 | Statistical Programming with R |
| FA 2017 | PHP 1560 | 4 | Statistical Programming with R |
| FA 2017 | PHP 2515 | 15 | Fundamentals of Probability and Statistical Inference |
| FA 2017 | PHP 2560 | 27 | Statistical Programming with R |
| SP 2018 | PHP 1511 | 5 | §Applied Regression Analysis |
| SP 2018 | PHP 2511 | 35 | §Applied Regression Analysis |
| FA 2018 | PHP 1560 | 9 | Statistical Programming with R |
| FA 2018 | PHP 2515 | 19 | Fundamentals of Probability and Statistical Inference |
| FA 2018 | PHP 2560 | 32 | Statistical Programming with R |

**B. Academic Advising**

| | | |
|---|---|---|
| 2015-2016 | Chang Chen | ScM in Biostatistics |
| 2015-2017 | Devin McCabge | AM in Biostatistics |
| 2015-2016 | Zheng Si | ScM in Biostatistics |
| 2015-2016 | Yanbing Wang | ScM in Biostatistics |
| 2015-2017 | Wanting Zhai | ScM in Biostatistics |
| 2016-2017 | Fang Hu | AM in Biostatistics |
| 2016–pres. | Jerson Cochancela | ScM in Biostatistics |
| 2016–pres. | Kaori Ito | ScM in Biostatistics |
| 2016-2017 | Meng Kun | ScM in Biostatistics |
| 2016–pres. | Yue Peng | AM in Biostatistics |
| 2017–2018 | Carol Shum | ScM in Biostatistics |
| 2017–2018 | Allan Kimaina | ScM in Biostatistics |
| 2017–2018 | Xiaofei Yang | AM in Biostatistics |
| 2017–2018 | Isaac Zhao | AM in Biostatistics |

**C. Thesis Supervision**

2017       Wanting Zhai     ScM in Biostatistics

**Analysis of temporal trends in opioid prescribing: Assessing the effectiveness of an opioid prescribing policy using segmented regression, difference in difference versus propensity scoring techniques**

2017       Monica Mendoza   Applied Mathematics Undergraduate Honors Thesis

**A Longitudinal Analysis of Self-Rate Health Among Women in Cebu, Philippines.**

2017       Sarah Eltinge     Statistics Undergraduate Capstone Project

**An Interactive Spatial Regression Model of 2016 Presidential Election Results**

2018       Jerson Cochancela  ScM in Biostatistics

2018       Wenyue Xing     ScM in Biostatistics

2018       Victor Omodi     ScM in Biostatistics

**Missing Data Methods Application to HIV Data from Western Kenya**

2018       Richard Ngari     MugoScM in Biostatistics

**Comparison of Interpretable Machine Learning Algorithms for the Prediction of Virologic Failure**    2018  Steven Liao  Statistics Honors Thesis Project 2018  Olivia Illes  Statistics Honors Thesis Project 2018  Jessica Kaminsky  **Neighborhood Risk Comparisons on Third Grade Math and Reading Scores in Rhode Island**

**D. Other Teaching and Advising Roles**

2015–pres.    MPH Core Advising Faculty

2015–pres.    Faculty Team Member: PHP 0100: First Year Seminar: Statistics is Everywhere

2016–pres.    First Year and Sophomore Undergraduate Advisor (4 students)


# Research Grants

## Active

[1] Innovative Training to Improve CER PCOR Systematic Review Production and Uptake

      Role:    Co-Investigator
      PI:    Christopher Schmid
      Agency:    Agency for Health Care Research and Quality (R25 HS23299)
      Amount:    $2,500,00
      Period:    2014-2019

[2] RI-Center for Clinical and Translational Science

      Role:    Co-Investigator
      PI:    James Padbury
      Agency:    National Institute of General Medical Sciences (U54 GM115677)
      Amount:    $19,500,00
      Period:    2016-2021

[3] Training and Teaching for Transforming Big Data Knowledge

      Role:    Co-Investigator
      PI:    Neil Sarkar
      Agency:    National Institute of Mental Health (R25 MH116440)
      Amount:    $427,000
      Period:    2016-2021

[4] Translating an area-based socio-economic deprivation index into clinical practice

      Role:    Co-PI
      PI:    Annie Gjelsvik & Adam Sullivan
      Agency:    RI Advance-CTR
      Amount:    $32,464
      Period:    2018-2019

**Pending**

a) Environmental Exposures and Programming of Fetal Development and Neurobehavior

     Role:    Biostatistician

     PI:      Surendra Sharma & Barry Lester

     Agency:  NIH

     Period:  2018-2023

b) Pragmatic Use of Metformin After Gestational Diabetes to Improve Maternal Health

     Role:    Co-Investigator

     PI:      Erika Werner & David Savitz

     Agency:  NIH (R01)

     Period:  2019-2024