

# Curriculum Vitae

## Jared C Foster, PhD

### Personal Information

**Email:** jared.foster@nih.gov

**Phone:** (734) 660-1167

**Address:** 9609 Medical Center Dr, Rm 5W638, Rockville, MD 20892

### Present Position

**Mathematical Statistician** - Biostatistics Branch, Biometric Research Program, 01/2017 – Present  
Division of Cancer Research and Diagnosis, National Cancer Institute, NIH

### Education

University of Wisconsin - Parkside - BS, Applied Mathematics 2006

University of California - Los Angeles - MS, Biostatistics 2008

University of Michigan - Ann Arbor - PhD, Biostatistics, Advisors: Jeremy M.G. Taylor and Bin Nan; Dissertation Title: *Subgroup Identification and Variable Selection from Randomized Clinical Trial Data* 2013

### Honors and Awards

**Rackham Conference Travel Grant (UM)** 2011-2013

**ENAR Distinguished Student Paper Award** 2013

### Previous Professional Positions and Major Appointments

**Graduate Student Research Assistant** - Semel Institute for Neuroscience and Human Behavior, University of California, Los Angeles, Los Angeles, California 04/2008 - 07/2008

**Research Specialist** - Department of Industrial Engineering, University of Wisconsin - Milwaukee, Milwaukee, Wisconsin 06/2008 - 08/2008

**Trainee** - Biostatistics Department, University of Michigan - Ann Arbor, Ann Arbor, Michigan 09/2008 - 08/2011  
NIH Biostatistics Training in Cancer Research Grant

**Graduate Student Research Assistant** - Biostatistics Department, University of Michigan - Ann Arbor, Ann Arbor, Michigan 09/2011 - 08/2013

**Consultant** - Department of Biostatistics, Indiana University, Indianapolis, Indiana "Identification of subgroups with enhanced behavioral intervention effects" (PI - Dr. Patrick Monahan) 08/2012 - 08/2013

**Research Associate** - Mayo Clinic, Section of Center of Cancer Center Statistics, Rochester, Minnesota 07/2015 – 01/2017

**Assistant Professor of Biostatistics** - Mayo Clinic College of Medicine 07/2016 – 01/2017

### Professional Memberships, Societies, and Services

#### Professional Memberships and Services

American Statistical Association

Member

2018 - Present

#### Journal Other Responsibilities

Anonymous Referee: American Journal of Preventive Medicine; Biometrics; Biostatistics; Clinical Trials; Nature Medicine; Journal of the American Statistical Association; Journal of the National Cancer Institute; Journal of the Royal Statistical Society: Series A; Paediatric and Perinatal Epidemiology; Scandinavian Journal of Statistics; Scientific Reports; Statistics in Biosciences; Statistics in Medicine

### **Institutional Committees**

Mayo Clinic Scientific Review Committee B (Solid Tumor) Statistical Reviewer	2016
Mayo Clinic Scientific Review Committee A (Hematology) Statistical Reviewer	2016
NCI Genitourinary Cancer Steering Committee Member	2017 - Present
NCI Breast Cancer Steering Committee Member	2017 - Present
ANCHOR Data and Safety Monitoring Board Non-Voting Member	2017 - Present
AMC Data and safety Monitoring Board Non-Voting Member	2017 - Present
NRG Oncology Data Monitoring Committee (Panel B) Non-Voting Member	2017 - Present

### **Presentations**

#### **Contributed**

Finding and Validating Subgroups in Clinical Trials (Poster) ENAR New Orleans, Louisiana	03/2010
Finding and Validating Subgroups in Clinical Trials (Poster) Michigan Student Symposium for Interdisciplinary Statistical Sciences Ann Arbor, Michigan	04/2010
Variable Selection in Monotone Single-Index Models via the Adaptive Lasso ENAR Orlando, Florida	03/2013
Subgroup Identification in Randomized Clinical Trial Data Using Random Forest and Regression Trees JSM (Topic Contributed) Montreal, Canada	08/2013
Simple Approximations to Optimal Treatment Regimes in Randomized Clinical Trial Data ENAR Baltimore, Maryland	03/2014

Identifying Subgroups of Enhanced Predictive Accuracy from Longitudinal Biomarker Data Using Tree-Based Approaches: Applications to Monitoring Fetal Growth 08/2014  
JSM  
Boston, Massachusetts

### Invited

Identifying Subgroups in Clinical Trials Via Random Forests and Regression Trees 09/2011  
Conference on Multiple Comparison Procedures  
Washington, District of Columbia

Subgroup Identification Using Random Forests and Regression Trees 06/2012  
Conference on Statistical Learning and Data Mining  
Ann Arbor, Michigan

Statistical Methods for Personalized Medicine 03/2013  
Rush Alzheimer's Disease Center, Rush University  
Chicago, Illinois

Subgroup Identification Using Randomized Clinical Trial Data 03/2013  
Department of Biostatistics, Brown University  
Providence, Rhode Island

Subgroup Identification Using Randomized Clinical Trial Data 04/2013  
Biostatistics Division, New York State Psychiatric Institute (NYSPI) (Columbia University)  
New York, New York

Subgroup Identification Using Virtual Twins Extensions 06/2013  
Novartis Biostatistics Workshop  
East Hanover, New Jersey

Individualized Prediction and Subgroup Identification from Longitudinal Biomarker Data: Applications to Fetal Growth 02/2015  
Department of Biostatistics and Computational Biology, University of Rochester  
Rochester, New York

Individualized Prediction and Subgroup Identification from Longitudinal Biomarker Data: Applications to Fetal Growth 03/2015  
Section of Cancer Center Statistics  
Rochester, Minnesota

Individualized Prediction and Subgroup Identification from Longitudinal Biomarker Data: Applications to Fetal Growth 04/2015

Department of Epidemiology and Biostatistics, Memorial Sloan Kettering  
Cancer Center  
New York, New York

Identifying Subgroups of Enhanced Predictive Accuracy from Longitudinal  
Biomarker Data Using Tree-Based Approaches: Applications to Monitoring  
Fetal Growth 06/2015

Joint 24th ICSA Applied Statistics Symposium and 13th Graybill Conference  
Fort Collins, Colorado

Dan Sargent: A Wonderful Mentor and a Great Man 03/2017

ENAR  
Washington, DC

Individualized prediction and subgroup identification from longitudinal  
biomarker data: applications to fetal growth 12/2017

SLAM Working Group Seminar, Johns Hopkins University  
Baltimore, MD

Data-driven methods for subgroup identification and personalized medicine  
(two-part short course) 03/2018

SLAM Working Group Seminar, Johns Hopkins University  
Baltimore, MD

## Research Interests

Subgroup Identification, Personalized Medicine, Personalized Prediction, Surrogate Endpoint Evaluation,  
Clinical Trials

## Peer-Reviewed Articles/Publications

1. Zhang J, Lee J, Urba S, **Foster J**, Worden F. A phase II trial evaluating weekly docetaxel and capecitabine in patients with metastatic or advanced, locally recurrent head and neck cancers. *Cancer Invest.* 2010 Nov; 28(9):910-6. PMID: 20590443 DOI: 10.3109/07357907.2010.483502
2. **Foster JC**, Taylor JM, Ruberg SJ. Subgroup identification from randomized clinical trial data. *Stat Med.* 2011 Oct 30; 30(24):2867-80. Epub 2011 Aug 04. PMID: 21815180 PMCID: 3880775 DOI: 10.1002/sim.4322
3. Taylor JMG, Cheng W, **Foster JC**. Reader Reaction to "A Robust Method for Estimating Optimal Treatment Regimes" by Zhang et al. *Biometrics.* 2012. DOI: 10.1111/biom.12228
4. Waterman JM, Nadeem E, Paczkowski E, **Foster JC**, Lavner JA, Belin T, Miranda J. Pre-placement risk and longitudinal cognitive development for children adopted from foster care. *Child Welfare.* 2013; 92(4):9-30. PMID: 24851473
5. **Foster JC**, Taylor JM, Nan B. Variable selection in monotone single-index models via the adaptive LASSO. *Stat Med.* 2013 Sep 30; 32(22):3944-54. Epub 2013 May 06. PMID: 23650074 PMCID: 3773259 DOI: 10.1002/sim.5834

6. Mason H, DeRubeis MB, **Foster JC**, Taylor JM, Worden FP. Outcomes evaluation of a weekly nurse practitioner-managed symptom management clinic for patients with head and neck cancer treated with chemoradiotherapy. *Oncol Nurs Forum*. 2013 Nov; 40(6):581-6. PMID: 24007925 DOI: 10.1188/13.ONF.40-06AP
7. **Foster JC**, Nan B, Shen L, Kaciroti N, Taylor JMG. Permutation Testing for Treatment-Covariate Interactions and Subgroup Identification. *Statistics in Bioscience*. 2015. DOI: 10.1007/s12561-015-9125-9
8. **Foster JC**, Taylor JM, Kaciroti N, Nan B. Simple subgroup approximations to optimal treatment regimes from randomized clinical trial data. *Biostatistics*. 2015 Apr; 16(2):368-82. Epub 2014 Nov 13. PMID: 25398774 DOI: 10.1093/biostatistics/kxu049
9. Nadeem E, Waterman J, **Foster J**, Paczkowski E, Belin TR, Miranda J. Long-term effects of pre-placement risk factors on childrens psychological symptoms and parenting among children adopted from foster care. *Journal of Emotional and Behavioral Disorders* (in press). 2016
10. **Foster JC**, Liu D, Albert PS, Liu A. Identifying Subgroups of Enhanced Predictive Accuracy from Longitudinal Biomarker Data Using Tree-Based Approaches: Applications to Fetal Growth. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*.2016; DOI: 10.1111/rssa.12182
11. Freedman RA, **Foster JC**, Seisler DK, Lafky JM, Muss HB, Cohen HJ, Mandelblatt J, Winer EP, Hudis CA, Partridge AH, Carey LA, Cirrincione C, Moreno-Aspitia A, Kimmick G, Jatoi A, Hurria A. Accrual of Older Breast Cancer Patients to Alliance Systemic Therapy Trials over Time: Protocol A151527. *Journal of Clinical Oncology* (Accepted). 2016
12. Freedman RA, Seisler DK, **Foster JC**, Lafky JM, Kimmick G, Hurria A, Cohen HJ, Winer EP, Hudis CA, Muss, HB. Risk of Acute Myeloid Leukemia and Myelodysplastic Syndrome Among Older Women Receiving Anthracycline-Based Adjuvant Chemotherapy for Breast Cancer on Modern Cooperative Group Trials (Alliance A151511). *Breast Cancer Research and Treatment* (Accepted). 2016
13. Himelstein A, **Foster JC**, Khatcheressian JL, Roberts JD, Seisler DK, Novotny PJ, Qin R, Go RS, Grubbs SS, O'Connor T, Velasco MR, Weckstein D, O'Mara A, Loprinzi CL, Shapiro CL. Effect of longer interval dosing vs. standard dosing of zoledronic acid on skeletal events among patients with bone metastasis: a randomized clinical trial. *Journal of the American Medical Association* 2017, 317(1):48–58. doi:10.1001/jama.2016.19425
14. **Foster JC**, Le-Rademacher JG, Feliciano JL, Gajra A, Seisler DK, Dematteo R, Lafky JM, Hurria A, Muss HB, Cohen HJ, Jatoi A, Comparative Nocebo Effects in Older Patients Enrolled in Cancer Therapeutic Trials: Observations from a 446-Patient Cohort. *Cancer* 2017, 123: 4193–4198. doi:10.1002/cncr.30867
15. Shapiro CL, Moriarty JP, Dusetzina S, Himelstein AL, **Foster JC**, Grubbs SS, Novotny PJ, and Borah BJ, Cost-Effectiveness Analysis of Monthly Zoledronic Acid, Zoledronic Acid Every 3 Months, and Monthly Denosumab in Women With Breast Cancer and Skeletal Metastases: CALGB 70604 (Alliance), *Journal of Clinical Oncology* 2017, 35:35, 3949–3955
16. Tallarico M, **Foster JC**, Seisler D, Lafky JM, Hurria A, Jatoi A, Cohen HJ, Muss HB, Bartlett N, Cheson BD, Jung SH, Leonard JP, Byrd JC, and Nabhan C, Frequency and Impact of Grade 3/4 Toxicities of Biologics on Outcomes of Elderly Patients with Chronic Lymphocytic Leukemia and Non-Hodgkin Lymphoma (Alliance A151611). *Journal of Geriatric Oncology* 2018 9(4):321-328, 2018
17. **Foster JC**, Le-Rademacher J, Mandrekar SJ: Design Considerations for Phase II Oncology Clinical Trials, in Roychoudhury S, Lahiri S (ed): *Statistical Approaches in Oncology Clinical Development*. Boca Raton, FL, CRC Press, 2018, pp 97-114 (book chapter)

18. **Foster JC**, Dong R, Kennedy, EH, Taylor JMG, Adjei A, Mandrekar SJ, Shi Q, Surrogate endpoint evaluation in the presence of treatment-by-covariate interactions (under revision)
19. **Foster JC**, Freidlin B, Kunos CA, Korn EL: Single-Arm Phase II Trials of Combination Therapies: The CTEP Experience 2008-2017 (submitted)