# ASHLEY LEECH, PhD, MS

#### **CONTACT INFORMATION**

Department of Health Policy Vanderbilt University School of Medicine 2525 West End Avenue, Suite 1275 Nashville, TN 37203 Email: ashley.leech@vanderbilt.edu

Phone: (917) 816-1055 Twitter: @ashleyleech

#### RESEARCH FIELDS

<u>Methodological</u>: Decision analysis, cost-effectiveness analysis, health economics, health policy, health services research

Topical: Maternal and infant health; pre-conception planning, pregnancy, postnatal and infant care

### **ACADEMIC APPOINTMENTS**

2018-Present Vanderbilt University School of Medicine (Nashville, Tennessee)

Assistant Professor, Department of Health Policy

#### POST-DOCTORAL TRAINING

2016-2018 **Post-Doctoral Fellow in Health Economics,** Center for the Evaluation of Value and

Risk in Health (CEVR), Institute for Clinical Research and Health Policy Studies, Tufts University School of Medicine/Tufts Medical Center (Boston, Massachusetts)

Mentors: Peter Neumann, Josh Cohen, Pei Jung Lin, Tara Lavelle, David Kim

### **EDUCATION**

2016 PhD, Health Services Research, Boston University School of Public Health

(Boston, Massachusetts)

Dissertation: Examining Access and Cost Implications for HIV Serodiscordant

Couples Seeking Conception Services: An Integrative Approach

Mentors: Ben Linas, Mari-Lynn Drainoni, Cindy Christiansen, James Burgess

2008 MS, African Studies, University of Oxford

(Oxford, England)

Dissertation: Writing Gender: Representations of Women in Margery Perham's

Personal Papers. Dissertation Mark: Distinction

2007 BA, Political Science, English Literature, *Magna Cum Laude*, Lycoming College

(Williamsport, Pennsylvania)

<u>Dissertation</u>: The Christian Right: A Comprehensive Study of the Influence of

Religiosity on Senate Roll Call Voting Behavior

2005 American Government, Summa Cum Laude, American University

(Washington, DC)

<u>Dissertation</u>: Social Security Reform: A Comprehensive Review of Personal Retirement Accounts

- Legislative Intern for United States Senator Arlen Specter (2006) in Washington, D.C.; U.S. Foreign Policy and Economics: Asia, Africa, and the Middle East.

#### **FUNDED RESEARCH - PRESENT**

2020-Present NIH/NIDA (1 K01 DA050740-01, Leech)

Total: \$860,390

"Advancing Treatment Outcomes for Pregnant Women with Opioid Use Disorder"

Funding period: 04/01/2020-03/31/2025

Role: Principal Investigator, 9.00 calendar months

2018-Present NIH/NIDA (1 R01 DA045729-01, Patrick)

Total: \$474,596

"Improving Access to Treatment for Women with Opioid Use Disorder"

Funding period: 4/15/2018 - 01/31/2022Role: Co-investigator, 1.2 calendar years

2019-Present NIH/NINDS (1 R01 NS113171, Trevathan),

Total: \$856,096 (Yr 1: DC), \$1,138,378 (Yr 1: Total)

"Bridging the Childhood Epilepsy Treatment Gap in Africa (BRIDGE)"

Funding period: 07/01/2019 - 06/30/2024Role: Co-investigator, 1.2 calendar years

### FUNDED RESEARCH - COMPLETED

2018-2020 CDC/Tennessee Department of Health (GR1959823, Limper)

Total: \$93,600

"Evaluation of TDOH's statewide efforts to improve screening and reduce morbidity and

mortality related to cancers across the state" Funding period: 8/1/2018 – 6/30/2020

Role: Co-investigator

## PEER-REVIEWED PUBLICATIONS

Nguyen JT, Cole AL, **Leech AA**, Wood WA, Dusetzina SB. Cost-Effectiveness of First-Line Tyrosine Kinase Inhibitor Therapy Initiation Strategies for Chronic Myeloid Leukemia. *Value in Health*. 2020 October; 23(10): 1292-1299. doi: 10.1016/j.jval.2020.05.019.

**Leech AA**, Christiansen C, Linas BP, Jacobsen DM, Morin I, Drainoni M-L. Healthcare practitioner experiences and willingness to prescribe pre-exposure prophylaxis in the US. *PLOS One*. 2020 September 3; 15(9): e0238375. https://doi.org/10.1371/journal.pone.0238375

Patrick SW, Richards M, McNeer E, Dupont W, Buntin MB, Martin PR, Davis MM, Davis C, Hartman K, **Leech AA**, Lovell KS, Stein BD, Cooper WO. Barriers to Accessing Medications for Opioid Use Disorder Among Pregnant Women. *JAMA Network Open.* 2020 August 14; 3(8): e2013456. doi:10.1001/jamanetworkopen.2020.13456.

Lessing NL, Zuckerman SL, Lazaro A, Leech AA, Leidinger A, Rutabasibwa N, Shabani HK, Mangat HS, Härtl R. Cost-effectiveness of operating on traumatic spinal injuries in low-middle income countries: a preliminary report from a major East African referral center. *Global Spine Journal*. 2020 August 17: 1-9. doi: 10.1177/2192568220944888.

**Leech AA**, Biancarelli DL, Aaron E, Miller ES, Coleman J, Anderson PL, Nkwihoreze H, Condron B, Sullivan M. HIV Pre-exposure Prophylaxis (PrEP) for Conception among HIV Serodiscordant Couples in the United States: A Cohort Study. *AIDS Patient Care STDs*. 2020 July 6; 34(7): 295-302. doi: 10.1089/apc.2020.0005.

**Leech AA**, Cooper MO, McNeer E, Scott TA, Patrick SW. Neonatal Abstinence Syndrome in the United States, 2004-2016. *Health Affairs*. 2020 May; 39(5): 764-767. doi: 10.1377/hlthaff.2019.00814.

**Leech AA**, Neumann PJ, Cohen JT, Jagasia M, Dusetzina SB. Balancing Value with Affordability: Cell Immunotherapy for Cancer Treatment in the U.S. *Oncologist*. 2020 May 9. doi: 10.1634/theoncologist.2020-0025

**Leech AA**, Kim DD, Cohen JT, Neumann PJ. Are Low and Middle-Income Countries Prioritising High-Value Healthcare Interventions? *BMJ Global Health*. 2020 February 4; 5(2): doi: 10.1136/bmjgh-2019-001850.

Lin P-J, D'Cruz B, Leech AA, Neumann PJ, Aigbogun MS, Oberdhan D, Lavelle T. Family and Caregiver Spillover Effects in Cost-Utility Analyses of Alzheimer's Disease Interventions. *Pharmacoeconomics*. 2019 April; 37(4): 597-608. doi: 10.1007/s40273-019-00788-3.

**Leech AA** and Dusetzina SB. Cost-Effective but Unaffordable: The CAR T Conundrum. *J Natl Cancer Inst.* 2018 Dec 17. doi: 10.1093/jnci/djy195.

**Leech AA**, Burgess J, Sullivan M, Kuohung W, Horný M, Drainoni M-L, Christiansen C, Linas BP. The Cost-Effectiveness of Pre-Exposure Prophylaxis for HIV Prevention During Conception in the United States. *AIDS*. 2018 Nov 28; 32(18): 2787-2798. doi: 10.1097/QAD.000000000002014.

Drainoni M-L, Biancarelli DL, **Leech AA**, Sullivan M, Bazzi AR. Implementing a Pre-Exposure Prophylaxis Intervention for Safer Conception among HIV Serodiscordant Couples: Recommendations for Health Care Providers. *J Health Dispar Res Pract.* 2018 Summer; 11(2): 19-33.

**Leech AA**, Kim DD, Cohen JT, Neumann PJ. Use and Misuse of Cost-Effectiveness Analysis Thresholds in Low- and Middle-Income Countries: Trends in Cost-per-DALY Studies. *Value in Health*. 2018 Jul, Epub 2018 Feb 21; 21(7): 759-761. doi: 10.1016/j.jval.2017.12.016.

Thokala P, Ochalek J, Leech AA, Tong T. Cost-Effectiveness Thresholds: The Past, the Present and the Future. *Pharmacoeconomics*. 2018 May; 36(5): 509-522. doi: 10.1007/s40273-017-0606-1.

**Leech AA**, Bortoletto P, Christiansen C, Drainoni M-L, Linas BP, Roeca C, et al. Assessing access to assisted reproductive services for serodiscordant couples with human immunodeficiency virus infection. *Fertil Steril*. 2018 Mar, Epub Feb 7; 109(3): 473-477. doi: 10.1016/j.fertnstert.2017.11.039.

Bazzi AR, Leech AA, Biancarelli DL, Sullivan M, Drainoni M-L. Experiences Using Pre-Exposure Prophylaxis for Safer Conception Among HIV Serodiscordant Heterosexual Couples in the United States. *AIDS Patient Care STDs*. 2017 Aug, Epub Jul 18; 31(8): 348–355. doi: 10.1089/apc.2017.0098.

Curtis M, El Ayadi A, Mkumba G, Butrick E, **Leech A**, Geissler J, et al. Association between severe obstetric hemorrhage and HIV status. *Int J Gynaecol Obstet*. 2014 Apr, Epub Jan 14;125(1): 79–80. doi: 10.1016/j.ijgo.2013.10.010.

### **PUBLICATIONS UNDER REVIEW**

Goodarz D, Masters WA, Rosettie KL, **Leech AA**, Cohen JT, Webb P, Kranz S, Mozaffarian D on behalf of Cost-Effectiveness Advisory Group. Cost-Effectiveness of Nutrition-Sensitive Food Programs to Reduce Child Mortality in India, Nigeria and Ethiopia. *Under review*.

### **SELECTED WORKS IN PROGRESS**

Clifford C, Lavelle T. Leech AA. A Cost-Effectiveness Analysis on Aneuploidy Screening Among Pregnant Hispanic Women in the United States.

Livermont T, Samuels L, Phillippi J, Zhu Y, Leech AA. Association of Substance Use and Postpartum Contraception.

**Leech AA**. Roberts AA, Dusetzina SB, Patrick SW. Out-Of-Pocket Costs and Prescription Refill of Opioid Agonist Pharmacotherapy Among Privately Insured Adults in the US.

**Leech AA**, Lin P-J, D'Cruz B, Parsons S, Lavelle T. Family and Caregiver Spillover Effects in Cancer Cost-Effectiveness Analyses.

Sampson C, Zamora B, van Baal P, Cairns J, Chalkidou K, Cubi-Molla P, Devlin N, García-Lorenzo B, Hughes DA, Leech AA, Towse A, Watson S. Supply-Side Cost-Effectiveness Thresholds: Questions for Evidence-Based Policy.

#### CONFERENCE PRESENTATIONS

Bridging the Childhood Epilepsy Treatment Gap in Africa (BRIDGE): A Protocol for a Cluster Randomized Clinical Trial of Task-Shifted Epilepsy Care in Three Northern Nigerian Cities. 16<sup>TH</sup> ICNC/49<sup>th</sup> Annual Child Neurology Society Meeting; San Diego, CA, October 19-23.

Barriers to Accessing Medications for Opioid Use Disorder Among Pregnant Women. National Clinician Scholars Program 2020 Annual Research Meeting; TBD.

Barriers to Accessing Medications for Opioid Use Disorder Among Pregnant Women. AcademyHealth 2020 Annual Research Meeting; Virtual - Online, July 28-August 6, 2020.

Barriers to Accessing Medications for Opioid Use Disorder Among Pregnant Women. Pediatric Academic Societies (PAS) Meeting; summer webinar series 2020.

An Assessment of Value for Routine Care in Pregnancy. 41st Annual North American Meeting, Society for Medical Decision Making (SMDM); Portland, Oregon, October 2019.

*Are Low and Middle-Income Countries Prioritizing High-Value Healthcare Interventions?* 41<sup>st</sup> Annual North American Meeting, Society for Medical Decision Making (SMDM); Portland, Oregon, October 2019.

Family and Caregiver Health-Related Quality of Life from Cancer: A Systematic Review of the Literature. AcademyHealth 2018 Annual Research Meeting; Seattle, Washington, June 2018

Cost-effectiveness thresholds in published cost-per-DALY studies. 12<sup>th</sup> World Congress of the International Health Economics Association (iHEA); Boston, Massachusetts, July 2017

Family and Caregiver Spillover Effects in Cancer Cost-Effectiveness Analyses. 39<sup>th</sup> Society for Medical Decision Making (SMDM) Annual Meeting; Pittsburgh, PA, October 2017

Assessing Access to Assisted Reproductive Services for HIV Serodiscordant Couples. American Society for Reproductive Medicine (ASRM) Scientific Congress; Salt Lake City, Utah, October 2016

Assessing Access to Assisted Reproductive Services for HIV Serodiscordant Couples. Evan's Memorial Department of Medicine; Boston University School of Medicine, Boston, MA, October 2016

Cost-Effectiveness of Pre-Exposure Prophylaxis for HIV Prevention During Conception. 9th International AIDS Society (IAS) Conference on HIV Science; Paris, France, July 2017 Family and Caregiver Spillover Effects in Alzheimer's Disease Cost-Effectiveness Analyses. Alzheimer's Association International Conference (AAIC); London, England, July 2017

Cost-Effectiveness of Pre-Exposure Prophylaxis for HIV Prevention During Conception. Tufts Clinical & Translational Science Poster Competition as part of the 19<sup>th</sup> Annual Clinical & Translational Science Graduate Program Symposium; Tufts Medical Center, Boston, MA, May 2017 Competition winner

Adherence to PrEP among HIV negative women attempting conception with HIV positive male partners in the US. International Association of Providers of AIDS Care (IAPAC) Annual Conference; Fort Lauderdale, Florida, May 2016

A unique population: adherence to PrEP among HIV negative women attempting conception with HIV positive male partners in the US. 7<sup>th</sup> International Workshop on HIV and Women; Seattle, Washington, February 2017

A unique population: Adherence to PrEP among HIV negative women attempting conception with HIV positive male partners in the US. 12th International Conference on HIV Treatment and Prevention Adherence; Miami, Florida, June 2017

#### **MEDIA**

ScienceDaily, Sept. 17, 2020: "Many practitioners are not prescribing HIV prevention medication" <a href="https://www.sciencedaily.com/releases/2020/09/200917181238.htm">https://www.sciencedaily.com/releases/2020/09/200917181238.htm</a>

Discover, Vanderbilt University Medical Center, Nov. 4, 2020: "Under-prescribing of PrEP is Widespread" <a href="https://discover.vumc.org/2020/11/under-prescribing-of-prep-is-widespread/">https://discover.vumc.org/2020/11/under-prescribing-of-prep-is-widespread/</a>

National Institutes of Health HEAL (Helping to End Addiction Long-Term) Initiative, May 13, 2020: "Research Spotlights | Relevant Reads: Neonatal Abstinence Syndrome in the United States, 2004-16"

Keet, Einav, Jan. 8, 2019: "Study Explores Cost-Effectiveness of Conception Strategies for HIV Serodiscordant Couples" <a href="https://www.contagionlive.com/news/study-explores-costeffectiveness-of-conception-strategies-for-hiv-serodiscordant-couples">https://www.contagionlive.com/news/study-explores-costeffectiveness-of-conception-strategies-for-hiv-serodiscordant-couples</a>

ISPOR News & Press Releases, July 23, 2018: "Challenging the Status Quo: Report Urges the Use of Local Context to Determine Cost-Effectiveness Thresholds in Low- and Middle-income Countries" <a href="http://press.ispor.org/index.php/challenging-the-status-quo-report-urges-the-use-of-local-context-to-determine-cost-effectiveness-thresholds-in-low-and-middle-income-countries/">http://press.ispor.org/index.php/challenging-the-status-quo-report-urges-the-use-of-local-context-to-determine-cost-effectiveness-thresholds-in-low-and-middle-income-countries/</a>

ASRM Bulletin, Feb. 7, 2018: "Fertility Care for HIV Serodiscordant Couples is More Widely Available" <a href="https://www.asrm.org/news-and-publications/news-and-research/press-releases-and-bulletins/fertility-care-for-hiv-serodiscordant-couples-is-more-widely-available/">https://www.asrm.org/news-and-publications/news-and-research/press-releases-and-bulletins/fertility-care-for-hiv-serodiscordant-couples-is-more-widely-available/</a>

#### PROFESSIONAL SERVICE AND AFFILIATIONS

### **Professional Affiliations:**

Society for Medical Decision Making (SMDM)

- Session Chair, 2019
- Education Committee Member, 2021

AcademyHealth

International Health Economics Association (iHEA)

### <u>University Service | Affiliations:</u>

MPH review committee

Vanderbilt University's Pre<sup>3</sup> Initiative (preventing adverse pregnancy outcomes and prematurity Vanderbilt University's Center for Child Health Policy

# Journal Referees:

Annals of Internal Medicine, Value in Health, Value in Health Regional Issues, Health Services Research, Journal of Patient-Reported Outcomes, Health and Quality of Life Outcomes, MDM Policy and Practice, WHO Bulletin, BMJ Open

### TEACHING EXPERIENCE

2019-Present	Instructor, Decision Analysis in Medicine and Public Health, Vanderbilt University
2019	Guest lecturer, Public Health Practice: Systems Thinking, Vanderbilt University
2017	Guest lecturer, Introduction to Cost-Effectiveness Analysis, Boston University
2014- 2016	Lecturer/Teaching Assistant, Comparative Health Systems and Policy in Industrialized and BRIC Countries, Boston University
2015	Teaching Assistant, Health Care Delivery Systems: Issues and Innovations, Boston University
2015	Lecturer, Leadership and Management in Public Health, Boston University
2013	Teaching Assistant, American Government for Public Health Students, Boston University

### RESEARCH SUPERVISION

2019-Present	Ben Osher, Medical student, research immersion project, Vanderbilt University School of Medicine; Project: Cost-effectiveness of Abdominal Aortic Aneurysm Screening
2018-Present	Caitlin Clifford, PGY3, OBGYN Resident, Tufts Medical Center; Project: Cost- Effectiveness Analysis on Aneuploidy Screening Among Pregnant Hispanic Women in the United States
2018	Mathias Schreiner, Master's 4+1 student, Vanderbilt University; Practicum experience on health policy work related to cost-effectiveness analysis and pregnancy
2018	Nicole Quinones, MPH student, thesis committee, Vanderbilt University; Project: Postpartum contraceptive use in the 2011-2015 NSFG
2019	Tamee Livermont, MPH student, thesis advisor, Vanderbilt University; Project: Assessment of postpartum contraceptive use in the 2016-2017 CDC PRAMS data
2019	Sadie Sommer, MPH student, thesis advisor, Vanderbilt University; Project: Maternal Mortality Committee Reports: A Comparative Review