

# Ashley L. O'Donoghue, PhD

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Center for Healthcare Delivery Science  
Beth Israel Deaconess Medical Center  
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## EDUCATION

|      |       |   |                    |
|------|-------|---|--------------------|
| 2020 | Ph.D. | Economics<br><i>Field: Applied Econometrics</i>     | Clark University   |
| 2017 | M.A.  | Economics   | Clark University   |
| 2015 | B.A.  | Economics and Mathematics<br><i>magna cum laude</i> | Assumption College |

## RESEARCH EXPERIENCE

|                |  |
|----------------|--|
| 2020 – Present | <b>Economist</b> , Center for Healthcare Delivery Science<br>Beth Israel Deaconess Medical Center                    |
| 2018 – 2020    | <b>Pre-Doctoral Research Fellow</b> , Center for Healthcare Delivery Science<br>Beth Israel Deaconess Medical Center |
| 2016 – 2018    | <b>Summer Research Assistant</b> , Department of Economics<br>Clark University                                       |
| 2014 – 2015    | <b>Research Intern</b><br>Worcester Regional Research Bureau   |

## PEER-REVIEWED PUBLICATIONS

- Mitra A, Griesdale D, Haljan G, O'Donoghue A, Stevens J, "How the high acuity unit changes mortality in the intensive care unit: a retrospective before-after study," *Canadian Journal of Anesthesia*. 2020.
- Hornig S, Joseph J, Calder S, Stevens J, O'Donoghue A, Safran C, Nathanson L, Leventhal E.  
"Assessment of unintentional duplicate orders by emergency department clinicians before and after implementation of visual aid in the electronic health record ordering system," *JAMA Network Open*. 2019;2(12):e1916499.

## FUNDING

- 2020 – 2022    Quantifying secondary health impacts of COVID-19  
Google.org  
Co-investigator (PI: Jennifer Stevens)  
*The goal of this project is to quantify the impact of COVID-19 on non-COVID-associated healthcare. A fundamental hypothesis is that preventive care and routine care will be delayed and deferred, leading to subsequent increased healthcare utilization.*

2018 – 2021     A new approach to patient safety: identifying risky clinical states to reduce preventable harms for hospitalized patients  
Doris Duke Charitable Foundation  
Collaborator (PI: Jennifer Stevens)  
*Our proposal developed and refined a tool to quantify the level of risk of preventable patient harms in intensive care units, prospectively validated this tool, and spread this tool to a new clinical environment.*

## NON-PEER REVIEWED PUBLICATIONS

Stevens J, Horng S, **O'Donoghue A**, Moravick S, Weiss A. "How one Boston hospital built a covid-19 forecasting system," *Harvard Business Review*, June 29, 2020.

## HONORS AND AWARDS

|             |  |                    |
|-------------|--|--------------------|
| 2020        | Lead, first place team, MIT COVID-19 Challenge Datathon              | MIT                |
| 2019        | Outstanding Teaching Assistant of the Year Award                     | Clark University   |
| 2018        | Department of Economics' departmental teaching assistant recognition | Clark University   |
| 2017        | Department of Economics' departmental teaching assistant recognition | Clark University   |
| 2015        | Ph.D. Full Tuition Scholarship                                       | Clark University   |
| 2014        | Conference Travel Award  | Assumption College |
| 2014        | Omicron Delta Epsilon Economics Honor Society                        | Assumption College |
| 2014        | Kappa Mu Epsilon Mathematics Honor Society                           | Assumption College |
| 2011        | Undergraduate Partial Tuition Scholarship                            | Assumption College |
| 2011 – 2014 | Dean's List  | Assumption College |

## PROFESSIONAL SERVICE

|      |   |                             |
|------|---|-----------------------------|
| 2020 | <i>npj Digital Medicine</i>                             | Ad-hoc Reviewer             |
| 2020 | American Society of Health Economists Annual Conference | Scientific Review Committee |
| 2020 | Southern Economic Association Annual Meeting            | Discussant                  |
| 2020 | Eastern Economic Association Annual Meeting             | Discussant                  |
| 2019 | Southern Economic Association Annual Meeting            | Discussant                  |

## INVITED TEACHING, PRESENTATIONS, AND POSTERS (including scheduled)

### LOCAL

|      |   |
|------|---|
| 2020 | "The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care removals"<br>Center for Healthcare Delivery Science Grand Rounds<br>Beth Israel Deaconess Medical Center, Boston, MA |
| 2020 | "Reopening businesses and risk of COVID-19 transmission"<br>Center for Healthcare Delivery Science Work-in-Progress Seminar<br>Beth Israel Deaconess Medical Center, Boston, MA                                     |

- 2020 “Real-time ML-driven COVID-19 forecasting”  
Department of Healthcare Quality Seminar  
Beth Israel Deaconess Medical Center, Boston, MA
- 2020 “Real-time ML-driven COVID-19 forecasting”  
Center for Healthcare Delivery Science Work-in-Progress Seminar  
Beth Israel Deaconess Medical Center, Boston, MA
- 2020 “Prospective cohort study of a proof-of-concept method to monitor nursing stress in the emergency department before and after an operational change”  
Artificial Intelligence/Machine Learning Symposium  
Beth Israel Deaconess Medical Center, Boston, MA

## **REGIONAL**

- 2020 “Real-time ML-drive COVID-19 forecasting”  
Massachusetts Health Data Consortium Webinar
- 2019 “The effect of naloxone access on opioid-related mortality”  
Economics Seminar Series  
Fitchburg State University, Fitchburg, MA
- 2019 “The effect of naloxone access on opioid-related mortality”  
17<sup>th</sup> Multidisciplinary Conference  
Clark University, Worcester, MA
- 2019 “The effect of a large-scale workfare program on child marriage in India”  
17<sup>th</sup> Multidisciplinary Conference  
Clark University, Worcester, MA
- 2018 “Effective Strategies for Teaching Assistants”  
University-Wide Teaching Assistant Orientation  
Clark University, Worcester, MA
- 2017 “Effective Strategies for Teaching Assistants”  
University-Wide Teaching Assistant Orientation  
Clark University, Worcester, MA

## **NATIONAL**

- 2020 “The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care removals”  
Southern Economic Association Annual Meeting, New Orleans, LA (virtual)
- 2020 “The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care removals”  
AcademyHealth Annual Research Meeting, Boston, MA (virtual)
- 2020 “The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care removals”  
American Society of Health Economists’ Annual Conference, St. Louis, MO\*
- 2020 “The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care removals”  
Eastern Economic Association Annual Meeting, Boston, MA
- 2019 “The effect of a large-scale workfare program on child marriage in India”  
Southern Economic Association Annual Meeting, Fort Lauderdale, FL

2019 “The effect of a large-scale workfare program on child marriage in India”  
IUSSP Population, Poverty and Inequality Research Conference, Ann Arbor, MI

## INTERNATIONAL

2014 “The non-linear impact of family income on child educational outcomes”  
Business and Economics Society International Annual Meeting, Florence, Italy

\* scheduled to present, but conference cancelled due to COVID-19 pandemic

## TEACHING EXPERIENCE

| <b>Instructor, Department of Economics, Clark University</b>         |                               |           |
|--|-------------------------------|-----------|
| Fall 2019  | Economics & the World Economy | 4.92/5.00 |
| Fall 2018  | Economics & the World Economy | 4.83/5.00 |
| <b>Teaching Assistant, Department of Economics, Clark University</b> |                               |           |
| Spring 2019  | Economics & the World Economy | 4.9/5.0   |
| Spring 2018  | Introduction to Statistics    | 4.8/5.0   |
| Fall 2017  | Economics & the World Economy | 4.8/5.0   |
| Spring 2017  | Introduction to Statistics    | 4.8/5.0   |
| Fall 2016  | Introduction to Statistics    | 4.9/5.0   |
| Spring 2016  | Economics & the World Economy | 4.6/5.0   |
| Fall 2015  | Economics & the World Economy | 4.5/5.0   |

## PROFESSIONAL SOCIETIES

|        |  |        |
|--------|--|--------|
| 2020 – | American Economic Association                              | Member |
| 2020 – | AcademyHealth  | Member |
| 2019 – | American Society of Health Economists                      | Member |
| 2019 – | Midwest Economic Association                               | Member |
| 2019 – | Southern Economic Association                              | Member |
| 2018 – | International Union for the Scientific Study of Population | Member |

## PROFESSIONAL DEVELOPMENT

|      |  |                  |
|------|--|------------------|
| 2020 | Machine Learning: Hands-On Python in Data Science ( <i>in-progress</i> ) | Udemy            |
| 2019 | Machine Learning Course, Stanford University                             | Coursera         |
| 2019 | Applied Data Science in Python Specialization Certificate, IBM           | Coursera         |
| 2018 | Seminar in College Teaching Course                                       | HECCMA           |
| 2016 | Project TIER (Teaching Integrity in Empirical Research) Workshop         | Clark University |