

Maia Céline Tarnas

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808-345-8438

EDUCATION

2019 Tufts University, summa cum laude
BA in Community Health and Middle Eastern Studies
Minor: Arabic
GPA: 3.93/4.00; Community Health GPA: 4.00
Thesis: Weaponization of Disease in the Yemeni and Syrian Civil Wars

RESEARCH EXPERIENCE

- 2019 – present **Fellow, Tufts Initiative for the Forecasting and Modeling of Infectious Diseases, Friedman School of Nutrition Science and Policy**
PI: Elena N. Naumova, PhD
Grant: Intelligence Advanced Research Projects Agency (IARPA) Hybrid Forecasting Competition (HFC); 2018 – 2021
- Produce spatiotemporal models to track outbreaks across Yemeni governorates and model waves of outbreaks using R and Stata
 - Compile data from international humanitarian organizations, government bodies, academic literature, grey literature, and data projects (such as the Armed Conflict Locations & Event Data Project) to produce a dataset that accurately reflects the impact of the cholera epidemic in Yemen
 - Conduct blinded analyses of outbreak patterns correlated with wartime and extreme weather events
 - Serve as subject-matter expert for the Yemeni Civil War and related wartime events
- 2019 **Research Assistant, International Society for Infectious Diseases**
- Created research topic and methodology using data from ProMED and organized international research team
 - Produced comparative models to analyze trends in WASH-, vector-, and vaccine-related disease outbreaks
 - Manually curated over 2,000 lines of data to fit outlined topic and methodology and ensured quality of data
 - Performed analyses to assess statistical significance, including data normalization to account for any potential confounds from increases in ProMED reporting
 - Prepared abstract for the International Congress on Infectious Diseases and manuscript published in the *International Journal for Infectious Diseases*

PROFESSIONAL APPOINTMENTS

2020 – present

Program Coordinator, Massachusetts Tuberculosis Drug Assistance Program, Community Research Initiative

- Manage daily operations and long-term growth of statewide program that removes cost barriers for patients accessing tuberculosis medication in Massachusetts
- Serve as key liaison with counterparts at the Massachusetts Department of Public Health; prepare monthly expenditure and narrative reports for State counterparts
- Coordinate program expansion by securing 17% budget increase, inclusion of Massachusetts' largest TB clinics in program, and launching quality improvement and evaluation initiatives for program
- Participate in annual fiscal planning and budget allocation
- Led program through COVID-19 transitional planning without experiencing any drops or lags in patient service

2019 – 2020

Program Specialist, Massachusetts Tuberculosis Drug Assistance Program, Community Research Initiative

- Introduced new methods for collecting protected health information and invoicing
- Wrote monthly and ad-hoc reports for the Massachusetts Department of Public Health and performed quality assessment on other programmatic reports
- Created internal and external tuberculosis and programmatic education materials and a standard operating procedure for the program
- Enrolled patients into the program (described above)
- Promoted to Program Coordinator by unanimous Senior Management decision

2017

Health Policy Intern, Centers for Disease Control and Prevention, Washington, D.C.

- Managed portfolio of critical topics including Zika, opioids, non-communicable diseases, birth defects, as well as internal CDC projects
- Attended and reported on federal hearings and briefings for CDC colleagues
- Prepared releases for Members of Congress, internal material for CDC subject-matter experts, and contributed to weekly reports for CDC Atlanta

PUBLICATIONS

Peer-Reviewed Publications

1. **Tarnas M**, Desai A, Lassmann B, Abbara A. Increase in vector-borne disease reporting affecting humans and animals in Syria and neighboring countries before and after the onset of conflict: a ProMED analysis 2003-2018. *International Journal of Infectious Diseases* (2020). <https://doi.org/10.1016/j.ijid.2020.09.1453>

In Review

1. **Tarnas M**, Weaponization of cholera in the Yemeni Civil War, 2015 – present

In Preparation

1. Simpson R, Babool, S, **Tarnas M**, Kaminski PM, Hartwick MA, Naumova EN. Application of dynamic mapping for understanding cholera and conflict during the Yemen Civil War, 2016-2019.
2. Simpson R, Babool S, **Tarnas M**, Kaminski PM, Hartwick MA, Naumova EN. An examination of seasonal signatures of cholera infection during the Yemen Civil War, 2016-2019.
3. Omar M, Rayes D, Zakieh O, Tarakji A, Anis I, Katoub M, **Tarnas M**, Whalen-Brown M, Abbara A. Waterborne diseases and the weaponization of water during conflict: examples from Aleppo and Idlib governorates in Syria

HONORS AND AWARDS

2019	Phi Beta Kappa, Tufts University
2019	Highest Thesis Honors, Tufts University
2019	Tisch Undergraduate Research Award, Tufts University, \$250
2019	Most Valuable Tutor, Statistics for Health Applications, Tufts University
2019	Most Valuable Tutor, Arabic, Tufts University
2018	Janice Calkin Community Health Award, Tufts University, \$670
2017 – 2019	Manogue Family Endowed Scholarship
2017	BA Rudolph Foundation Undergraduate Public Service Scholar Award, \$3,000
2017	Tufts University Career Center Grant, \$3,500
2017	National Invitational Rowing Championship All-Academic Team

CONFERENCE PRESENTATIONS

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| 2020 | Tarnas M , Lassmann B, Desai A, Abbara A. “Impact of the Syrian Conflict on Vector-Borne Disease Trends in Syria and Neighboring Countries: A One Health ProMED Analysis Between 2003 to 2018.” 19 th International Congress on |
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- Infectious Diseases. Poster presentation. September 10-13, 2020. (Conference canceled).
- 2020 **Tarnas M**, Babool S, Simpson RB, Kaminski PM, Naumova EN. “Risks of Cholera Transmission Amplified by the War Conflicts in Yemen, 2016-2018.” 11th Annual Consortium of Universities for Global Health Conference. Poster presentation. April 18-20, 2020. (Conference canceled).
- 2020 Babool S, **Tarnas M**, Simpson RB, Kaminski PM, Naumova EN. “Understanding of the Cholera Outbreak Patterns in Yemen's Governances during the Civil War, 2016-2018.” 11th Annual Consortium of Universities for Global Health Conference. Poster presentation. April 18-20, 2020. (Conference canceled).
- 2020 Simpson RB, **Tarnas M**, Babool S, Kaminski PM, Venkat A, Naumova EN. “Intentionally Broken Barriers and Cascading Risk of Cholera Spread in Yemen, 2016-2018.” 11th Annual Consortium of Universities for Global Health Conference. Poster presentation. April 18-20, 2020. (Conference canceled).
- 2019 **Tarnas M**. “The Role of Stress in the Spread and Progression of Human Immunodeficiency Virus in Men Who Have Sex with Men.” Tisch Undergraduate Research Awards. April 19, 2019.
- 2019 **Tarnas M**. “Weaponization of Disease in the Yemeni and Syrian Civil Wars.” Tufts University Undergraduate Research and Scholarship Symposium. Oral Presentation. May 2, 2019.

TEACHING EXPERIENCE

- 2019 – 2020 **Introduction to Global Health, Tufts University (Teaching Assistant)**
Ran twice-weekly office hours for undergraduate students in this Community Health core curriculum course; transitioned to remote teaching during the COVID-19 pandemic.
- 2018 – 2019 **Head Statistics for Health Applications Tutor, Academic Resource Center, Tufts University**
Held weekly office hours and was available for one-on-one appointments; worked weekly with specific students by request of the professor to ensure progression in class and material comprehension; managed team of Statistics for Health Application tutors; acquired position through nomination by professor.
- 2018 – 2019 **Head Arabic Tutor, Academic Resource Center, Tufts University**
Held weekly office hours and language table and was available for one-on-one appointments; developed curriculum for weekly language tables; assisted professors in extra-credit assignments and workshops for students; created and led test review sessions; managed team of Arabic tutors; acquired position through nomination by professor.

SERVICE

University

2018 – 2019 Tour Guide Program Vice Chair, Tufts University Office of Admissions
2018 – 2019 Head Costume Designer, Tufts University Department of Theatre, Dance,
and Performance Studies
2016 – 2018 Varsity Rower, Tufts University Women's Rowing

Community

2019 – present Boston Medical Reserve Corps Member, COVID-19 response
2018 – 2019 BA Women's Initiative, Application Review Committee Member
2015 – 2016 Peer Health Exchange, Health Educator

LANGUAGES

Arabic (proficient in reading, speaking, and writing)
Spanish (conversational in reading, speaking, and writing)