

# Timothy Barry

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## EDUCATION

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**Carnegie Mellon University**  
PhD in Statistics

2018 –

**University of Maryland, College Park**  
BS in Mathematics with high honors  
Minor in Computer Science

2014 – 2018

## INTERSHIPS AND EXPERIENCE

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**Machine Learning Team, National Institutes of Health**

Summer 2018

- Trained statistical machine learning algorithms to forecast the recovery trajectory of individuals who suffered stroke.
- Advisors: Francisco Pereira & Charles Zheng

**Center for Quantitative Medicine, UConn Health**

Summer 2017

- Constructed a mathematical model of iron metabolism in the human body; used the model to test *in silico* the effect of treatments on iron-abnormal individuals.
- Advisor: Pedro Mendes

**Laboratory of William Fagan, University of Maryland**

2015 – 2018

- Investigated wolf interaction with humans and human infrastructure using a general linear and mixed-effects modeling framework.
- Advisor: Eliezer Gurarie

## HONORS AND AWARDS

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• Howard Hughes Medical Institute Fellowship

2017

• Maryland Summer Scholars Research Grant

2016

• Banneker-Key Scholarship, University of Maryland's most prestigious scholarship

2014

## COMPUTING

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- Languages: R, Python, C
- Version control systems: Git/Github
- Operating systems: Unix

## SERVICE AND SCIENCE OUTREACH

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• Volunteer math, science, and English tutor to local elementary and middle school students (through UMD Lakeland STARS program)

2015 – 2018

• Volunteer mentor to a computer science undergraduate student (through CMU AI Undergraduate Research Mentoring program)

2019

## PUBLICATIONS AND CONFERENCE PRESENTATIONS

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- Barry, Timothy, Eliezer Gurarie, Farid Cheraghi, Ilpo Kajola, William Fagan. "Dispersal makes the heart grow bolder: variation in habitat selection across wolf life history." *Animal Behaviour* (accepted pending revision). 2019 +
- Barry, Timothy. "Collections in R: Review and Proposal." *The R Journal* 10.1. 2018
- Barry, Timothy, Gockenbach Mary, Mendes Pedro, Parmar Jignesh. "A mathematical model of iron metabolism in the human body." Presented at Joint Mathematics Meetings in San Diego, CA. 2018