# Thomas Samuel O'Leary

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#### Education

| 2019 – now  | PhD Student, Biology, University of Vermont, Burlington, VT    |
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| 2012 - 2016 | B.A. Biology, Cum Laude, University of Vermont, Burlington, VT |

### Fellowships & Awards

| 2019 – now  | National Science Foundation (NSF) Research Traineeship Fellow, QuEST, University of Vermont |
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| 2012 - 2016 | UVM Presidential Scholarship  |
| 2012 - 2016 | UVM Men's Track and Field Athletic Scholarship  |
| 2015        | America East All-Academic Team  |
| 2012        | Physics Subject Award   |

### **Professional Experience**

| 2018 – 2019 | Lab Research Technician, Previs Lab, Dept. Mol. Phys. & Biophys, University of Vermont |
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| 2017 – 2018 | Lab Research Technician, Lockwood Lab, Biology Dept., University of Vermont            |
| 2016 – 2017 | Molecular Biology Laboratory Technician I & II, Charles River Labs, Malvern, PA        |

#### **Publications**

- **O'Leary, T. S.,** Snyder, J., Sadayappan, S., Day, S. M., & Previs, M. J. (2019). MYBPC3 truncation mutations enhance actomyosin contractile mechanics in human hypertrophic cardiomyopathy. *Journal of Molecular and Cellular Cardiology*, 127, 165–173.
- Li, A., Nelson, S. R., Rahmanseresht, S., Braet, F., Cornachione, A. S., Previs, S., **O'Leary, T.S.,** ... Warshaw, D. M. (2019). Skeletal MyBP-C isoforms tune the molecular contractility of divergent skeletal muscle systems. *Proceedings of the National Academy of Sciences, 116*(43), 21882–21892.
- Rahmanseresht, S., Lee, K. H., **O'Leary, T.S.**, Robbins, J., Warshaw., D. M., Craig, R., & M. J. Previs. (submitted for publication). Fluorescence imaging of actin and myosin-binding protein C in cardiac muscle with nanometer accuracy.
- Helms, A.S., Tang, V.T., **O'Leary, T.S.**, Friedline S., Wauchope, M., Arora A., ... Day S.M. (submitted for publication) Effects of *MYBPC3* loss of function mutations preceding hypertrophic cardiomyopathy.

## Teaching

### Teaching Assistant

2020 – now Genetics, sophomore level for science majors, *University of Vermont*2019 – now Comparative Physiology, biology capstone course, *University of Vermont* 

#### **Guest Lectures**

2019 Proteomics & hypertrophic cardiomyopathy, Comparative Physiology, University of Vermont

### **Seminars & Presentations**

2019 MYBPC3 truncation mutations and hypertrophic cardiomyopathy. Graduate Seminar, University of Vermont.

### **Skills**

**Programming** R, python, and Matlab

**Lab** proteomics, transcriptomics, RNA & DNA extraction and sequencing

# Athletics

| 2017 – 2019 | Volunteer Coach, Varsity Cross Country and Track and Field, <i>University of Vermont</i> |
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| 2014 - 2016 | Captain Cross Country and Track & Field, University of Vermont                           |
| 2012 - 2016 | Varsity Cross Country and Track & Field, <i>University of Vermont</i>                    |