

# Aris Paschalidis

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## Education

### University of Massachusetts Chan Medical School

M.D. CANDIDATE

Worcester, MA

Aug. 2022 - Present

### Brown University

B.S. IN COMPUTATIONAL BIOLOGY, MAGNA CUM LAUDE, GPA 4.0

Providence, RI

Sep. 2017 - May 2021

### Boston University

TOOK CLASSES WHILE IN HIGH SCHOOL, GPA 3.98

Boston, MA

Sep. 2015 - May 2017

## Research Experience

### Brown University

Providence, RI

BIOINFORMATICIAN

Jun. 2021 - Aug. 2022

- Developed algorithms to determine the number of malarial strains found in an individual. Developed computational tools for molecular inversion probe design, data processing, and analysis.

LAB MEMBER

Jan. 2020 - Aug. 2022

- Member of the Bailey Lab. Developed an algorithm to determine the number of malarial strains found in an individual, known as the Complexity Of Infection (COI).

### Massachusetts General Hospital (MGH)

Boston, MA

RESEARCH INTERN

May 2019 - Sep. 2020

- Worked at the Orthopedic Trauma Department, shadowing doctors and conducting research primarily with Dr. Heng. Focused on examining associations between mental health scores and physical function scores of patients who had recently undergone total knee or hip replacements.

SUMMER FELLOW

May 2019 - Dec. 2019

- Worked at the cardiovascular research center under the direction of Dr. Das, Dr. Varrias, and Dr. Rodosthenous. Examined associations between RNAs and heart failure outcomes.

### Brown University

Providence, RI

RESEARCH INTERN

May 2018 - Jan. 2019

- Worked with Prof. Schmid at the Center for Evidence Based Synthesis on creating a package in R to analyze n-of-1 clinical trials.

### Massachusetts Institute of Technology

Cambridge, MA

RESEARCH INTERN

Jun. 2016 - Sep. 2016

- Intern at the MIT Operations Research Center. Worked with Dr. Bertsimas and Dr. Dunn on regression and classification problems using an approach that derives optimal decision trees by solving an integer optimization problem.

RESEARCH INTERN

Jun. 2015 - Sep. 2015

- Intern at the MIT Operations Research Center. Worked with Dr. Dimitris Bertsimas on a regression problem with an application to ophthalmology.

## Selected Leadership & Community Outreach

### Interest Group Leader

UMass Chan Medical School

ORTHOPEDIC SURGERY INTEREST GROUP

Apr. 2023 - Apr. 2024

### Volunteer Firefighter & EMT

Scituate, RI

HOPE & JACKSON FIRE COMPANY

Sep. 2020 - Nov. 2021

## Selected Honors & Awards

2024 **Scholarship**, New England Hellenic Medical and Dental Society

2024 **Honorable Mention**, Massachusetts Medical Society Research Poster Symposium

2019 **Fellowship**, American Heart Association Undergraduate Student Summer Fellowship Award

## Selected Publications

### Pre-Matriculation Experiences Minimally Impact the Specialty Interests of First-Year Medical Students

PASCHALIDIS A., McANENA A. P., MCCLENNEN T., SHEPARD R. T., GALA R.

Massachusetts Medical Society; March 22, 2024; Waltham, Massachusetts.

### Patients Consistently Report Worse Outcomes Following Revision Total Knee Arthroplasty Compared to Primary Total Knee Arthroplasty

SALIMY M. S., PASCHALIDIS A., DUNAHOE J. A., CHEN A. F., ALPAUGH K., BEDAIR H. S., MELNIC C. M.

*The Journal of Arthroplasty*. 2024;39(2):459–465.e1. doi: 10.1016/j.arth.2023.08.014.

### coiaf: Directly Estimating Complexity of Infection with Allele Frequencies

PASCHALIDIS A., WATSON O. J., AYDEMIR O., VERITY R., BAILEY J. A.

*PLOS Computational Biology*. 2023;19(6):e1010247. doi: 10.1371/journal.pcbi.1010247.

### The Not-So-Distant Future or Just Hype? Utilizing Machine Learning to Predict 30-Day Post-Operative Complications in Laparoscopic Colectomy Patients

VELMAHOS C. S., PASCHALIDIS A., PARANJPE C. N.

*The American Surgeon*. 2023;89(12):5648–5654. doi: 10.1177/00031348231167397.

### Effects of Mental Health on PROMIS Scores After Primary THA

PASCHALIDIS A., SALIMY M. S., ROBINSON M. G., CHEN A. F., MELNIC C. M., O'BRIEN T. M., BEDAIR H. S., HENG M.

Eastern Orthopedic Association Annual Meeting; October 26, 2022; Naples, Florida.

### Predictive Models of Mortality for Hospitalized Patients With COVID-19: Retrospective Cohort Study

WANG T., PASCHALIDIS A., LIU Q., LIU Y., YUAN Y., PASCHALIDIS I. C.

*JMIR Medical Informatics*. 2020;8(10):e21788. doi: 10.2196/21788.

### Regression and Classification Using Optimal Decision Trees

BERTSIMAS D., DUNN J., PASCHALIDIS A.

2017 IEEE MIT Undergraduate Research Technology Conference (URTC). 2017:1–4. doi: 10.1109/urtc.2017.8284195.