Aris **Paschalidis**

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Education

University of Massachusetts Chan Medical School — *Worcester, MA*
M.D. Candidate — *Aug. 2022 - Present*

Brown University — *Providence, RI*
B.S. in Computational Biology, Magna Cum Laude, GPA 4.0 — *Sep. 2017 - May 2021*

Boston University — *Boston, MA*
Took classes while in high school, GPA 3.98 — *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 TAVR 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.

Leadership & Community Outreach

Interest Group Leader — *UMass Chan Medical School*
Orthopedic Surgery Interest Group — *April 2023 - Present*

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., Paranjape 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.