

# Paige E Tomer

Contact info redacted. Refer to website.

## EDUCATION

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- 2020 – 2024     **Bachelor of Arts (Honors), *summa cum laude***  
Macalester College, St. Paul, MN  
Cumulative GPA: 3.9; Major GPA: 4.0  
Major: Applied Mathematics and Statistics (Honors); Minors: Anthropology, Community and Global Health  
Honors Thesis: *An investigation into the causes of home advantage in professional soccer*
- 2023     **Summer Institute in Biostatistics and Data Science (SIBDS) participant**  
Columbia University, New York, NY  
Coursework: Introduction to Biostatistics; Introduction to Data Science; Research project
- 2022     **Study abroad semester**  
Leiden University College, The Hague, NL  
Coursework: Global Health Policy; Aging and Society; Perspectives on Globalization; Introduction to Geographical Information Systems (GIS); Independent Study Project

## RELEVANT WORK EXPERIENCE

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### RESEARCH FOCUSED:

- 2024 – PRESENT     **IRTA Post-Baccalaureate Research Fellow**  
National Institute of Environmental Health Sciences (NIEHS) | Epidemiology Branch | Puberty and Cancer Epidemiology Group  
*PI:* Mandy Goldberg; *Branch Chief:* Dale Sandler
- Lead and contribute to ongoing research projects (see below)
  - Complete literature reviews
  - Write manuscripts to summarize research findings
  - Participate on the Epidemiology Branch's Engagement Committee
  - Act as Post-Baccalaureate Representative on the Epidemiology Branch's Fellows Council

### TEACHING FOCUSED:

- 2021- 2023     **Teaching Assistant for Epidemiology (STAT 125)**  
Macalester College | Mathematics, Statistics, and Computer Science Department | Fall 2023  
*Supervisor:* Prof. Vittorio Addona
- Primary teaching assistant (of two) in a class of 35 students
  - Assisted in answering questions during class time
  - Held office hours to support students with homework and concepts
  - Graded quizzes and assignments
- Teaching Assistant for Probability (MATH/STAT 354)**  
Macalester College | Mathematics, Statistics, and Computer Science Department | Spring 2023  
*Supervisor:* Prof. Vittorio Addona

- Primary teaching assistant (of two) in a class of 25
- Hosted office hours to support students with homework and concepts
- Graded assignments

#### **Math and Economics Tutor**

Macalester College | Macalester Academic Excellence Center | 2021 - 2022

*Supervisor:* Prof. Dave Ehren, Ms. Stephanie Alden

- Tutored peers in Multivariate Calculus II, Multivariate Calculus III, Introduction to Statistics, and Principles of Economics
- Received CRLA Level I Certification

## **PUBLICATIONS**

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**Tomer, Paige E.** “An investigation into the causes of home field advantage in professional soccer.” Mathematics, Statistics, and Computer Science Honors Projects. 2024. 86.

Available at [https://digitalcommons.macalester.edu/mathcs\\_honors/86/](https://digitalcommons.macalester.edu/mathcs_honors/86/)

## **PUBLICATIONS IN PREPARATION**

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**Tomer PE**, Zhao S, Shaw ND, Stallings VA, Kelly A, Rogan WJ, Umbach DM, Goldberg M. Characterizing postnatal trajectories of breast bud diameter in male and female infants using latent class linear mixed models.

**Tomer PE**, Umbach DM, Rogan WJ, Goldberg M. Comparison of breast bud diameter measurement techniques in infancy.

Goldberg M, **Tomer PE**, et al. Dietary patterns in adolescence and breast cancer incidence in the Sister Study cohort

Goldberg M, ..., **Tomer PE**, et al. Does endogenous estrogen play a role in female minipuberty development?

## **RESEARCH EXPERIENCE**

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*The effectiveness of antipsychotic medications for schizophrenic patients: Perphenazine vs olanzapine* | Columbia University Mailman School of Public Health (under advisement of Dr. Caleb Miles) | Completed Summer 2023

*COVID-19 governmental stringency and the subsequent effect on birth rates* | Independent study project, Leiden University College (under advisement of Dr. Kristin Makszin) | Completed Fall 2022

*A better Reimann integral* | Macalester College, Real Analysis Final Project | Completed Fall 2023

*Predicting wins in the premier league with a shiny app* | Machine Learning Project, Machine Learning Group Project | Completed Fall 2023

## AWARDS AND CERTIFICATIONS

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Kaplan Endowed Prize in Statistics and Data Science | Macalester College | May 2024

Summa Cum Laude | Macalester College | May 2024

Honors in Statistics | Macalester College | May 2024

Dean's List | Macalester College | 2021 – 2024

All-MIAC Academic Honors | Minnesota Intercollegiate Athletic Conference | Fall 2021

College Reading and Learning Association Level 1 | Macalester College | Spring 2022

Vulnerable Subject (Researching Involving Children) Certification | CITI Program | Summer 2024

Good Clinical Practices Certification | CITI Program | Summer 2024

Biomedical 101 Certification | CITI Program | Summer 2024

## PRESENTATION EXPERIENCE

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### UPCOMING PRESENTATIONS

**Society for Epidemiological Research** | Boston MA, June 2025 | *Characterizing postnatal trajectories of breast bud diameter in male and female infants using latent class mixed models* (poster presentation)

**Society for Pediatric and Perinatal Epidemiological Research** | Boston MA, June 2025 | *Characterizing postnatal trajectories of breast bud diameter in male and female infants using latent class mixed models* (poster presentation)

### PAST PRESENTATIONS

**Post-Baccalaureate Poster Day at the NIH** | National Institutes of Health, Bethesda MD | May 2025 | *Characterizing postnatal trajectories of breast diameter in male and female infants using latent class mixed models* (poster presentation)

**Honors Defense** | Mathematics, Statistics, and Computer Science Department, Macalester College | April 2024 | *An investigation into the causes of home advantage in professional soccer* (oral presentation)

**Senior Symposium** | Community and Global Health Concentration, Macalester College | April 2024 | *The effectiveness of antipsychotic medications for schizophrenic patients: Perphenazine vs olanzapine* (poster presentation)

**Capstone Presentation** | Mathematics, Statistics, and Computer Science Department, Macalester College | February 2024 | *Home sweet home: How and why home advantage exists in soccer* (oral presentation)

**Real Analysis Final Presentation** | Mathematics, Statistics, and Computer Science Department, Macalester College | December 2023 | *A better Reimann integral* (oral presentation)

**Summer Research Symposium Poster Presentation** | Columbia Mailman School of Public Health | July 2023 | *The effectiveness of antipsychotic medications for schizophrenic patients: Perphenazine vs olanzapine* (poster presentation)

## **SERVICE**

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**Post-Baccalaureate Representative on Fellows Council** | Epidemiology Branch, NIEHS | September 2024 – Present

**Engagement Committee Member** | Epidemiology Branch, NIEHS | June 2024 – Present

**Co-Chair and Founding Member of the Mathematics, Statistics, and Computer Science Department's Student Advisory Board** | Macalester College | September 2022 – May 2024

**Hospice Companion Volunteer** | Our Lady of Peace Hospice | January 2024 – May 2024

**Math Outreach Volunteer** | Hidden River Middle School | January 2023 – May 2023

**Camp Counselor** | Girls Rock Math Camp | Summers 2018 - 2020