

CURRICULUM VITAE

EXPERY O. OMOLLO

Massachusetts Institute of Technology, 77 Mass Avenue, Cambridge, MA, 02139, USA

Website: experyomollo.com

EDUCATION

- 2023 University of Wisconsin–Madison, Madison, WI, USA
Ph.D. in Biochemistry; Doctoral research with Dr. Robert Landick
- Thesis:* Role of NusG, NusA, and Nascent RNA Structures in Regulating Transcription Elongation and Termination
- 2020 Michigan State University, East Lansing, MI, USA
B.S. *honors* in Biochemistry & Molecular Biology

PROFESSIONAL APPOINTMENTS

- 2024 - Damon Runyon Postdoctoral Fellow, MIT
Advisor: Dr. Gene-Wei Li, Department of Biology, MIT
- 2020 - 2023 Graduate Research Fellow, University of Wisconsin–Madison
Advisor: Dr. Robert Landick, Department of Biochemistry
- 2022 Visiting researcher, Rockefeller University
Advisors: Dr. Seth Darst and Dr. Elizabeth Campbell
- 2018 - 2020 Undergraduate Research Assistant, Michigan State University
Advisor: Dr. Lisa Lapidus, Department of Physics & Astronomy
- 2019 Summer Intern, Bayer Crop Science
Advisor: Dr. Jonathan Lamb, Precision Genomics Department
- 2017 - 2019 Undergraduate Research Assistant, Michigan State University
Advisor: Dr. Lisa Tiemann, Department of Plant, Soil, and Microbial Sciences
- 2018 Summer Intern, Aga Khan University Hospital
Advisor: Dr. Zahir Moloo, Department of Pathology and Laboratory Medicine

HONORS AND FELLOWSHIPS

2024 - 2028	Fellow, Damon Runyon Cancer Research Foundation
2025	Outstanding Alumni, Michigan State University Charles Drew Program
2023	William H. Peterson Graduate Fellowship, University of Wisconsin-Madison
2023	Best Poster Presentation, Tuberculosis Gordon Research Conference, Spain
2019	Most Outstanding Junior, Michigan State University College of Natural Science
2019	Dean's Undergraduate Research Fellowship
2018	Best Poster Presentation, UURAF, Michigan State University
2018	Undergraduate Research Fellowship, Michigan State University
2016 - 2020	MasterCard Foundation Scholarship

CURRENT SUPPORT

Damon Runyon Cancer Research Foundation.

“Elucidating what determines the strength of bacterial transcription terminators.”

07/01/2024 – 06/30/2028, \$300,000 total costs

PREVIOUS SUPPORT

William H. Peterson Graduate Fellowship.

“Regulation of transcription elongation in bacteria.”

07/01/2023 – 06/30/2024, \$41,000 total costs

PUBLICATIONS

Battaglia, R.O., Ermis, E., **Omollo, E.O.**, Li, GW. (2026). The defining features of intrinsic transcription terminators. *Under review*

Delbeau, M.*, **Omollo, E.O.***, Froom, R.*, Koh, S., Mooney, R.A., Lilic, M., Brewer, J.J., Rock, J., Darst, S.A., Campbell, E.A., Landick, R. (2023). Structural and functional basis of the universal transcription factor NusG pro-pausing activity in *Mycobacterium tuberculosis*. *Molecular Cell* **83**, 1474 – 1488. ***co-first author**

You, L., **Omollo, E.O.**, Yu, C., Mooney, R.A., Shi, J., Shen, L., Wu, X., Wen, A., He, D., Zeng, Y., Feng, Y., Landick, R., Zhang, Y. (2023). Structural basis for intrinsic transcription termination. *Nature* 613, 783–789.

INVITED LECTURES

2026, New England Biolabs. Ipswich, MA.
2025, Commencement address, Michigan State University Charles Drew Program, East Lansing, MI.
2024, Boston Bacterial Meeting. Boston, MA.
2023, Molecular Genetics of Bacteria and Phage Meeting, Madison, WI.
2023, University of Wisconsin-Madison Biochemistry Retreat, Madison, WI.
2023, Gordon Research Seminar on Mechanism of Microbial Transcription, Manchester, NH.
2023, University of Wisconsin-Madison Department of Biochemistry seminar, Madison, WI.
2022, Mountain Lake Termination Meeting, Pembroke, VA

POSTER PRESENTATIONS

2024, Damon Runyon Retreat, Sturbridge MA.
2023, Gordon Research Conference of Tuberculosis Drug Discovery, Castelldefels, Spain.
2023, Gordon Research Seminar of Tuberculosis Drug Discovery, Castelldefels, Spain.
2023, Gordon Research Conference on Mechanisms of Microbial Transcription, Manchester, NH.
2023, Department of Biochemistry poster session, University of Wisconsin-Madison, Madison, WI.
2019, Undergraduate Research and Arts Forum, Michigan State University, East Lansing, MI.
2018, Undergraduate Research and Arts Forum, Michigan State University, East Lansing, MI.

TEACHING/TRAINING

Teaching

MIT	Advanced Undergraduate Seminar – 7.341 (Fall 2025; lecture and seminar course; 30 contact hours)
University of Wisconsin - Madison	Prokaryotic Molecular Biology – BMB 612 (Fall 2023; invited lecturer; 2 contact hours)
	Advanced Biochemistry – BMB 508 (Fall 2022; teaching assistant; 17 contact hours) (Spring 2023; teaching assistant; 17 contact hours)

Training

Kunsal Langthong	Undergraduate Research Assistant, Feb 2026 - present
James Liu	Research Intern, 2023

PROFESSIONAL SERVICE

Chair, Professional Development Committee, MIT Postdoctoral Association (2024 – 2025)

Manuscripts reviewed for the following professional journals:

Nature Microbiology

mBio

Transcription

Journal of Bacteriology

CONSULTING AND BUSINESS POSITIONS

2022 - 2023	Project Manager and Consultant, WiSolve Consulting Group
2019 - 2021	Founder and CEO, NaoEx Solutions
2015 - 2016	Relationship Officer, Equity Bank Kenya