

EMILY RUMSCHLAG BOOMS, PHD

Department of Biology
Northeastern Illinois University
5500 N. St Louis Avenue, Chicago, Illinois 60625

phone (312)442-5725
email e-booms@neiu.edu

EDUCATION

Ph.D., Microbiology University of Illinois-Chicago (2010)

B.A., Biology Indiana University- Bloomington (2003)

PROFESSIONAL EXPERIENCE

Department of Biology, Northeastern Illinois University (2025-Present). *Full Professor*

Illinois Science and Technology Coalition (2023-2024). *Mentor*

Department of Biology, Northeastern Illinois University (2018-2025). *Associate Professor*

Department of Biology, Northeastern Illinois University (2011-2018). *Assistant Professor*

Department of Biology, Northeastern Illinois University (2010-2011). *Instructor*

Department of Microbiology, University of Illinois- Chicago, (2010-12). *Research specialist*

Department of Biology, Lake Forest College (2010) *Guest Instructor*

PUBLICATIONS

Lima O, Manoela L, Natalia S, Khara G, Estrada A, Buitrago D, Hamm A, Nadeem S, Naylor K, Chen Z, Yanez B, **Booms E**, Searcy J, Biggers A, Tussing-Humphreys LM. Design of a mindfulness intervention to reduce risk factors for colorectal cancer among at-risk Black women in Chicago. *Journal of Applied Physiology*. 2024. 137(5): 1484-1493. doi.org/10.1152/jappphysiol.00608.2024

Oliveira ML, Biggers A, Oddo VM, Yanez B, **Booms E**, Sharp L, Naylor K, Wolf PG, Tussing-Humphreys L. A Perspective Review on Diet Quality, Excess Adiposity, and Chronic Psychosocial Stress and Implications for Early-Onset Colorectal Cancer. *J Nutr*. 2024 Apr;154(4):1069-1079. doi: 10.1016/j.tjnut.2024.03.002. Epub 2024 Mar 6.

Zhang HJ, **Rumschlag-Booms E**, Guan YF, Wang DY, Liu KL, Li WF, Nguyen VH, Cuong NM, Soejarto DD, Fong HHS, Rong L. Potent Inhibitor of Drug-Resistant HIV-1 Strains Identified from the Medicinal Plant *Justicia gendarussa*. *J Nat Prod*. 2017 Jun 23;80(6):1798-1807. doi: 10.1021/acs.jnatprod.7b00004. Epub 2017 Jun 14.

Zhang HJ, **Rumschlag-Booms E**, Guan YF, Liu KL, Wang DY, Li WF, Nguyen VH, Cuong NM, Soejarto DD, Fong HHS, Rong L. Anti-HIV diphyllin glycosides from *Justicia gendarussa*. *Phytochemistry*. 2017 Apr;136:94-100. doi: 10.1016/j.phytochem.2017.01.005. Epub 2017 Jan 19.

Cheng H, Koning K, O'Hearn A, Wang M, **Rumschlag-Booms E**, Varhegyi E, Rong L. A parallel genome-wide RNAi screening strategy to identify host proteins important for entry of Marburg virus and H5N1 influenza virus. *Virol J*. 2015 Nov 24;12:194. doi: 10.1186/s12985-015-0420-3.

O'Hearn A, Wang M, Cheng H, Lear-Rooney CM, Koning K, **Rumschlag-Booms E**, Varhegyi E, Olinger G, Rong L. Role of EXT1 and Glycosaminoglycans in the Early Stage of Filovirus Entry. *J Virol*. 2015 May;89(10):5441-9. doi: 10.1128/JVI.03689-14. Epub 2015 Mar 4.

Rumschlag-Booms E, Rong L. Influenza a virus entry: implications in virulence and future therapeutics. *Adv Virol*. 2013;2013:121924. doi: 10.1155/2013/121924. Epub 2013 Jan 9.

Arslan AD, He X, Wang M, **Rumschlag-Booms E**, Rong L, Beck WT. A high-throughput assay to identify small-molecule modulators of alternative pre-mRNA splicing. *J Biomol Screen*. 2013 Feb;18(2):180-90. doi: 10.1177/1087057112459901. Epub 2012 Sep 12.

Rumschlag-Booms E, Zhang H, Soejarto DD, Fong HH, Rong L. Development of an Antiviral Screening Protocol: One-Stone-Two-Birds. *J Antivir Antiretrovir*. 2011 Jan 7;3:8-10. doi: 10.4172/jaa.1000027.

Rumschlag-Booms E, Guo Y, Wang J, Caffrey M, Rong L. Comparative analysis between a low pathogenic and a high pathogenic influenza H5 hemagglutinin in cell entry. *Virol J*. 2009 Jun 10;6:76. doi: 10.1186/1743-422X-6-76.

Manicassamy B, Wang J, **Rumschlag E**, Tymen S, Volchkova V, Volchkov V, Rong L. Characterization of Marburg virus glycoprotein in viral entry. *Virology*. 2007 Feb 5;358(1):79-88. doi: 10.1016/j.virol.2006.06.041. Epub 2006 Sep 20.

SELECT GRANTS/HONORS/AWARDS

ChicagoCHEC Incubator and Catalyst award	2023-2025
Service Excellence Award, Northeastern Illinois University	2021-2022
Teaching Excellence Award, Northeastern Illinois University	2015
NEIU Student Center for Science Engagement Research Award	2012-2019
American Heart Association Pre-doctoral Fellowship	2008-2010
Athletic Rowing Scholarship, Indiana University	2002-2003
Academic All Big Ten, Indiana University	2000-2002
Alpha Beta Honorary, Indiana University	2000-2002