

SCIENCE SEMINAR

The Role of the Lymphatic System in Lupus:

Exploring an Understudied Pathway in Autoimmune Disease

PRESENTED BY:

Mir Howlader, PhD

Post-doctoral Researcher

Dr. Theresa Lu Lab

Hospital for Special Surgery

**Tuesday
September 29, 2026
2:15 PM
Holt Room
Hennessy Center**

For Zoom registration:



Systemic lupus erythematosus (SLE) is a chronic autoimmune disease caused by a complex interplay of immunoregulatory, hormonal, and environmental factors. While advances in treatment have significantly reduced mortality in lupus, morbidity remains high with only 2 new mechanistically different FDA treatments over the past 50+ years. Lupus patients are photosensitive, developing skin inflammation with even ambient ultraviolet radiation (UVR). Mechanistic insight into the link between the skin responses and autoimmunity is limited. We approach this question by studying the role of an often-overlooked system in lupus research, the lymphatic system. Our results point to lymphatic modulations such as manual lymphatic drainage as a therapeutic target in lupus, and may be more accessible and cost-effective adjunct to add to ongoing medical therapies for lupus and related diseases.

Dr. Mir Howlader attended New York University where she earned a Bachelor of Arts in Biology in 2018 and went on to complete her PhD in 2025 in the Biochemistry, Structural Biology, Cell Biology, Developmental Biology and Molecular Biology (BCMB) program at Weill Cornell Medical College. She is currently a postdoctoral researcher where she continues to study skin lymphatics with Dr. Theresa Lu at the Hospital for Special Surgery.