



Image Source: National Institutes of Health

Robert H. Lurie Comprehensive Cancer Center of Northwestern University

Lurie Cancer Center's Basic Research Seminar Series

Coordination of the Immune Response to Transfused Red Blood Cells: Why are RBC's Sometimes Immunogenic?

Tuesday, November 1, 2022
11:00 a.m.- 12:00 p.m. CT

Baldwin Auditorium, 1st Floor
Robert H. Lurie Medical Research Center
303 E. Superior St., Chicago, IL

Dr. Eisenbarth's laboratory focuses on how dendritic cells, B cells and T cells interact to induce tailored adaptive immune responses. The work spans how this triad is operational for transfused red blood cells (RBCs) to become immunogenic. A recent publication arising from the lab showed that inflammatory cytokine response, dendritic cell activation and migration, and the subsequent alloantibody response to transfused RBCs require MyD88, suggesting specific and limited pattern recognition proteins are responsible for sensing RBCs and triggering alloimmunization. As many cancer patients become anemic and require blood transfusions, understanding the underlying biology behind RBCs becoming immunogenic has direct applications to cancer patient care and outcomes.



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