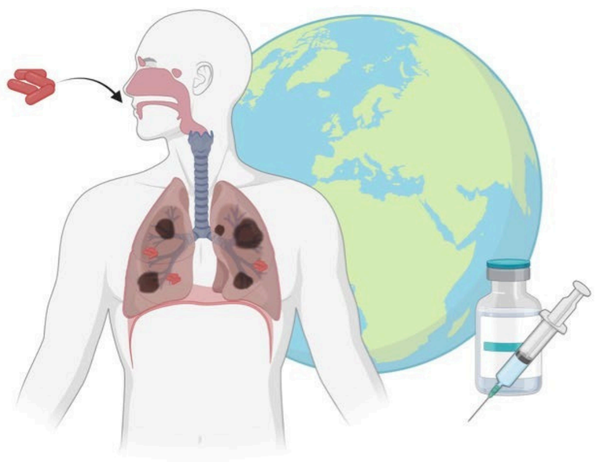
Louis Hopkins

Ph.D. Candidate, Immunology
First Year ARCS Scholar
Herz Global Impact Award

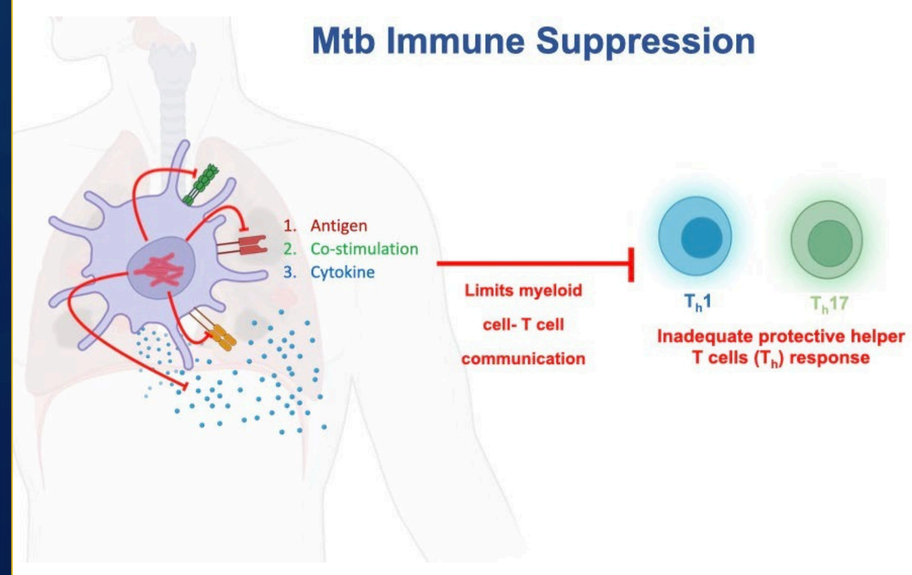
EMORY UNIVERSITY

Investigating TIGIT-mediated immune suppression during Mycobacterium Tuberculosis (Mtb) infection and pathogenesis

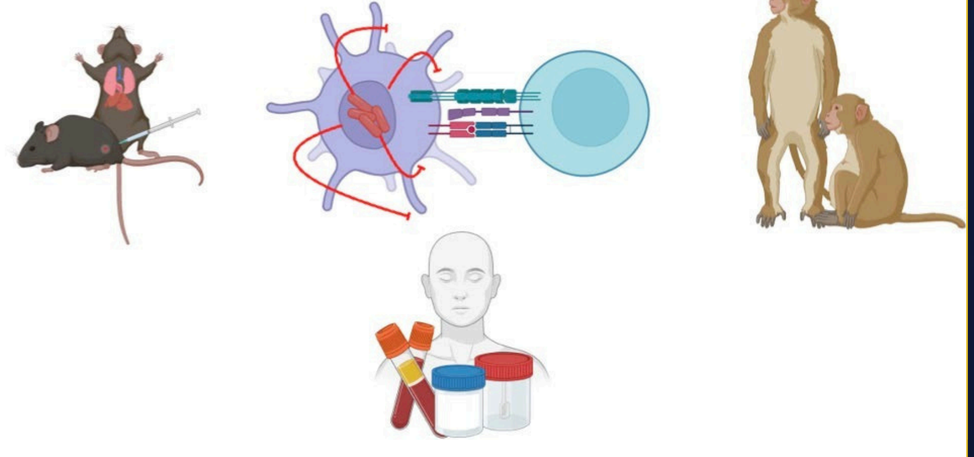
Tuberculosis: Global Public Health Threat



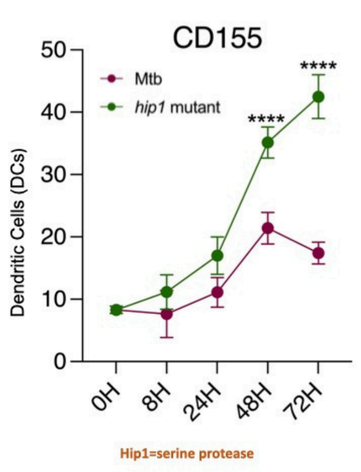
Mtb Immune Suppression



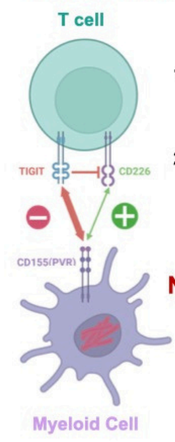
Improve TB immune responses?



Mtb limits expression of adhesion molecule, CD155



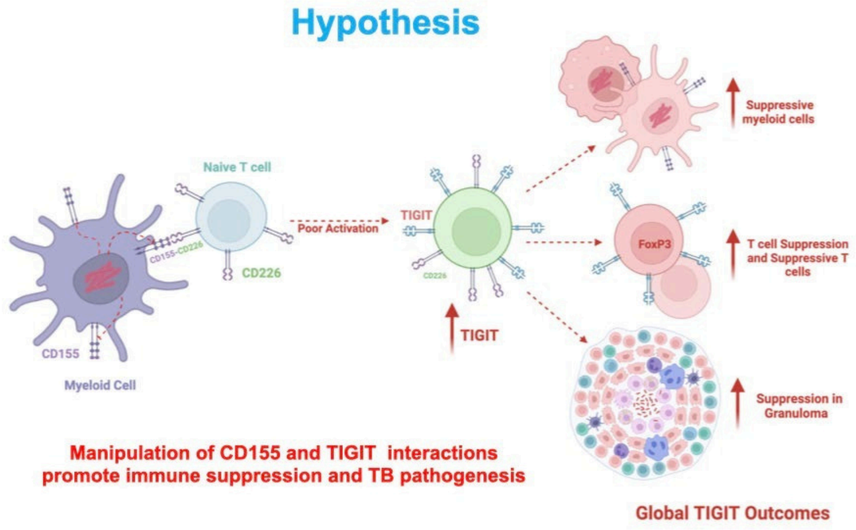
Why could this be beneficial for the pathogen?



1. **CD155-TIGIT promotes immune suppression**
2. **Regulates the T cell responses important for TB control**

Not explored in the TB field

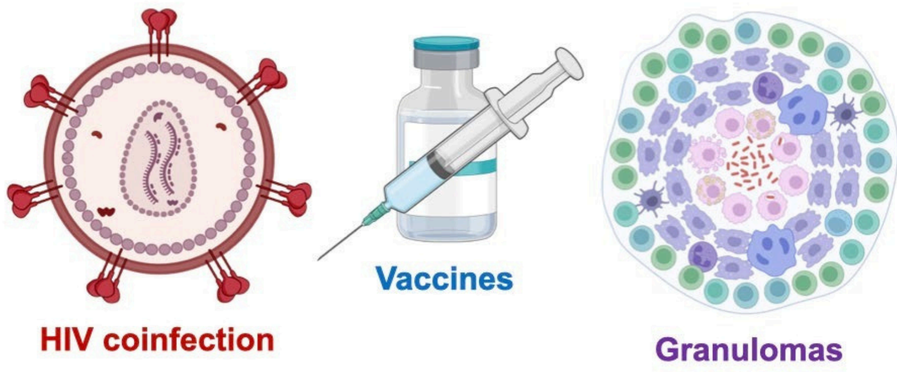
Hypothesis



Manipulation of CD155 and TIGIT interactions promote immune suppression and TB pathogenesis

Global TIGIT Outcomes

Provide new insights into immunosuppression throughout the spectrum of TB disease



HIV coinfection

Vaccines

Granulomas

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Scholar Awards Celebration
November 15, 2023

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