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and Data Science Collaboratory

Applications of Interpretable Machine Learning to Infectious Disease Research

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Interpretable ML for Mtb Fitness

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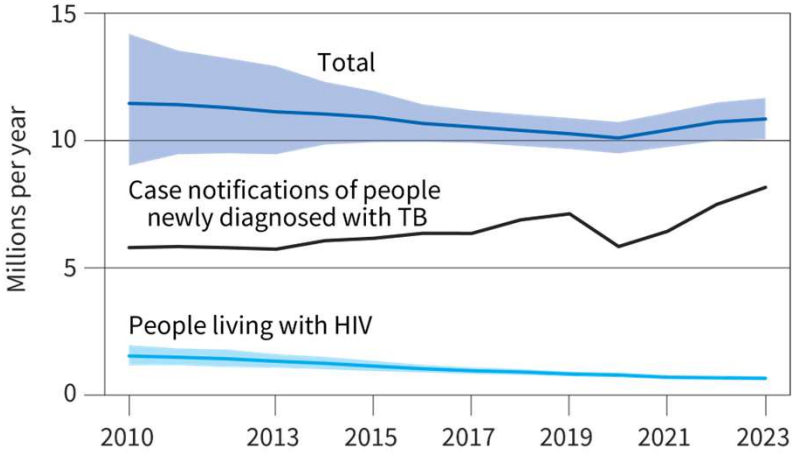
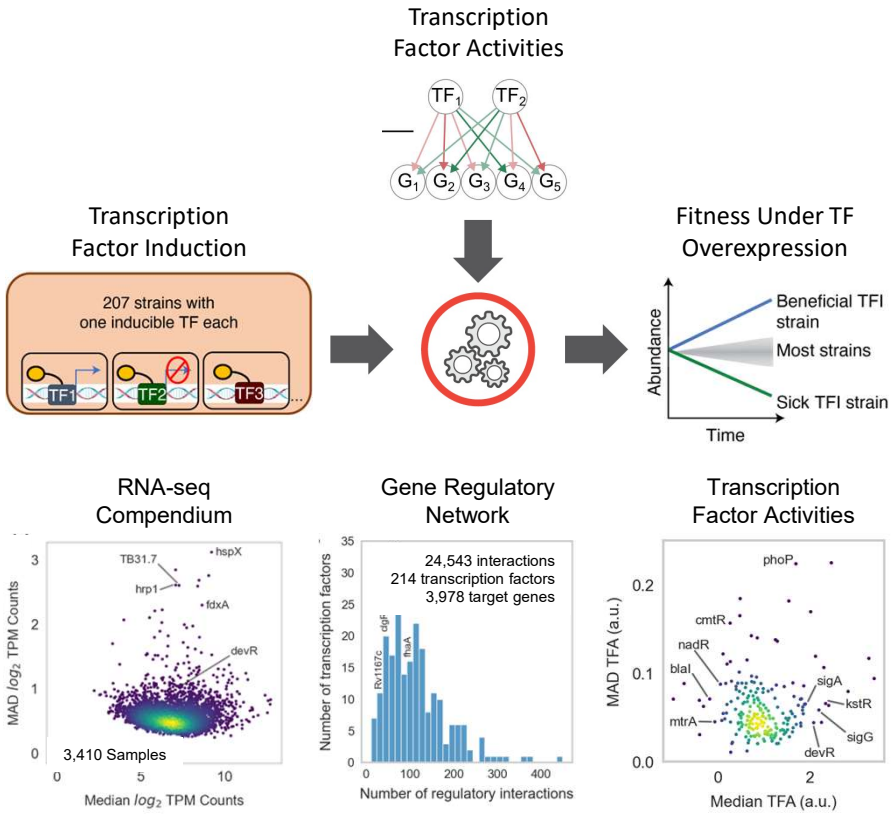
Tuberculosis is the greatest source of global mortality from an infectious disease



Interpretable machine learning modeling of *Mycobacterium tuberculosis* fitness under stress



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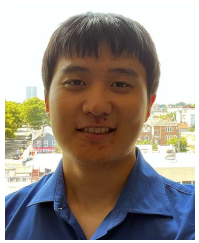
Edson Petry


Oliver Gu


Shuyi Ma


Ethan Bustad

Bustad E, Front Tuberc 2025

Mtb Fitness Under Stress

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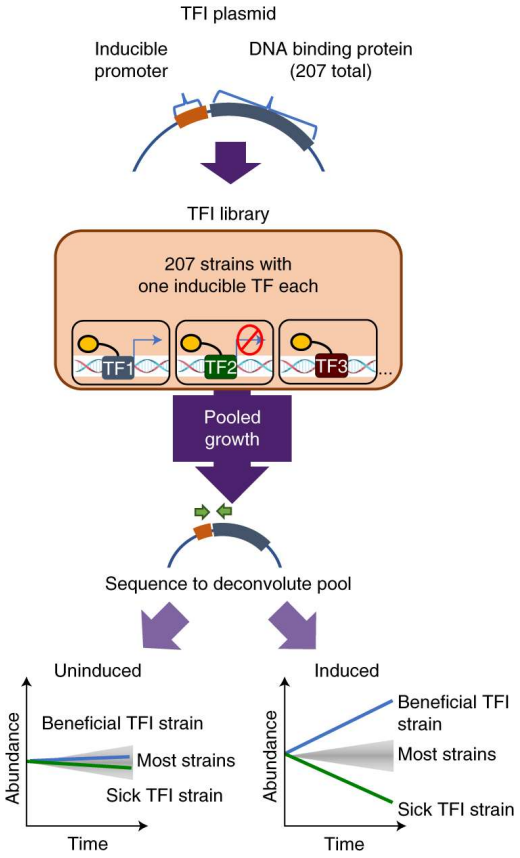

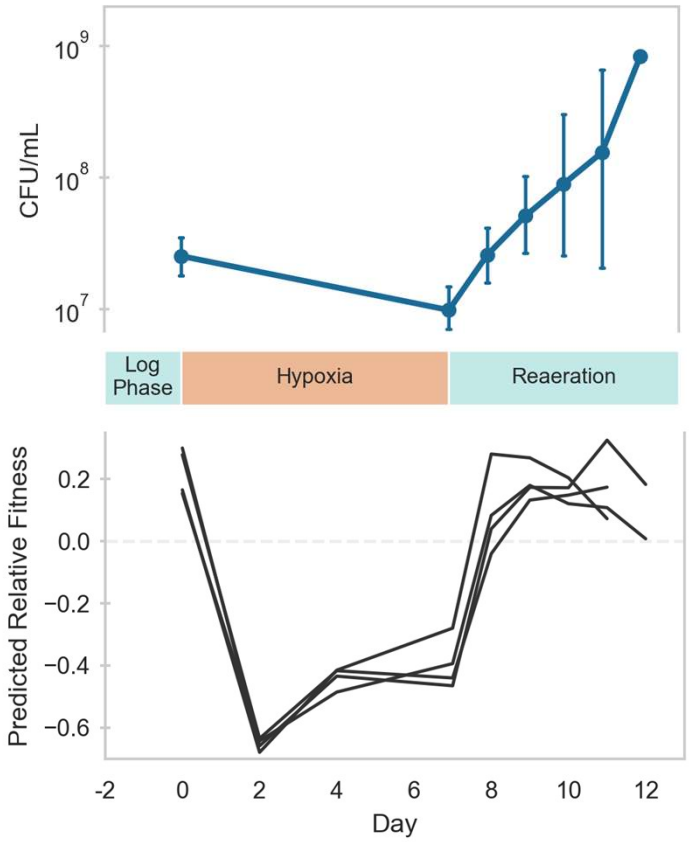

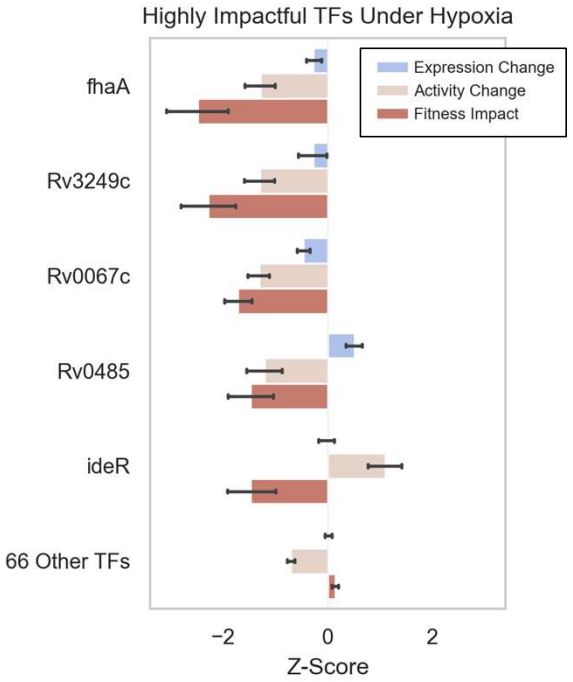

Transcription factor activity better predicts Mtb fitness under hypoxic stress than gene expression