

How does pre-existing immunity interact with other factors to impact influenza vaccine responses?

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- In general, individuals with higher preexisting immunity have weaker vaccine responses.
- Our collaborators used a mechanistic host vaccine response model to make quantitative predictions about this relationship. (Fig 1.)
- Our goals with CIVIC human cohort data:
 - Check these predictions.
 - Examine effect modification by other host factors, e.g. age.
 - Examine cross-protective vaccine responses.

Fig from Zarnitsyna VI et al, PLoS Pathog, 2016.

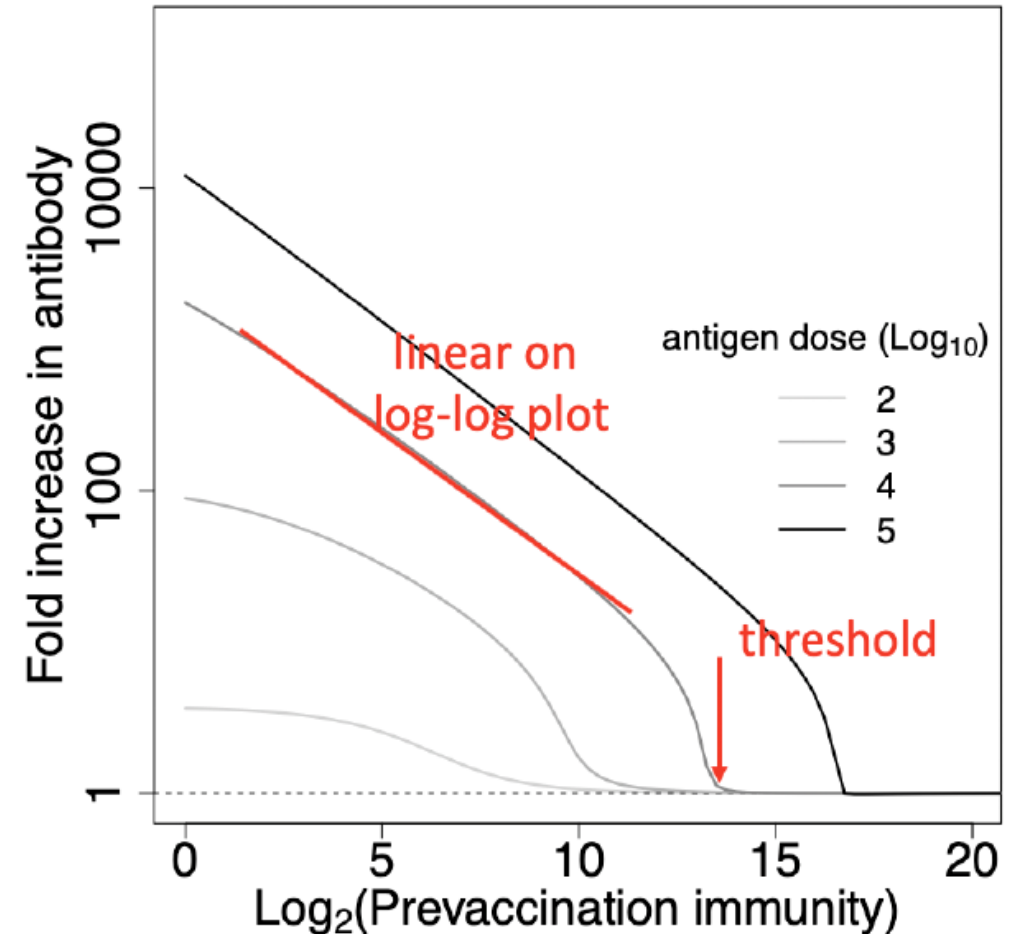


Fig 1. Mechanistic model predictions. We expect linear log-log plots most of the time with effect modification by dose.

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