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Prediction (early recognition) of emerging flu strain clusters

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H3N2 cover letter and highlights

The special nature of this paper – an application of network science to a pressing biomedical problem, not understood by biologists – is explained below.

- Vaccine effectiveness depends on selecting the right virus strain as target
- There are thousands of circulating flu virus strains
- In 2014 and 2015 vaccine effectiveness dropped from normal 50% to 15%
- Dimensional reduction permits early recognition of emerging dominant strains
- The analysis correlates much better with vaccine effectiveness than present methods

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