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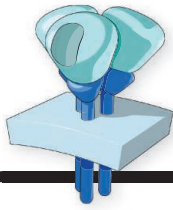
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REVIEW SUMMARY; FOR FULL TEXT:  
[dx.doi.org/10.1126/science.aaa4019](http://dx.doi.org/10.1126/science.aaa4019)

### RESEARCH ARTICLES

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[dx.doi.org/10.1126/science.aac4223](http://dx.doi.org/10.1126/science.aac4223)

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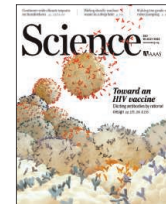
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Getting noticed is half the battle  
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### ON THE COVER



A goal in HIV research is to design a vaccine that will protect against the rapidly mutating virus. Such a vaccine would elicit B cells to produce broadly neutralizing antibodies with

a high affinity for the HIV envelope protein. Pictured here are B cells displaying colored antibodies; B cells in the foreground express unmutated antibodies of varying specificities. Over time, the right mutations take place to create the lineage of the sought-after antibody (lineage depicted by orange-red gradient, with the unmutated ancestor depicted in orange). This happens in some HIV patients naturally, but now scientists have immunized animals with engineered immunogens that prime a first step on the antibody mutation pathway. See pages 139, 154, and 156.

*Illustration: Valerie Altounian/Science*

# Science

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