

BLOTS ON A FIELD?

BLOTS ON A FIELD?

IMAGE IN QUESTION

1 | SPOT THE SIMILARITIES

2 | MATCH CONTRAST

3 | COLORIZE & ALIGN

4 | MERGE

5 | CALCULATE SIMILARITY

UNMISTAKABLE DIFFERENCES



How an image sleuth uncovered possible tampering

Vanderbilt neuroscientist Matthew Schrag found apparently falsified images in papers by University of Minnesota, Twin Cities, neuroscientist Sylvain Lesné, including a 2006 paper in *Nature* co-authored with Karen Ashe and others. It linked an amyloid-beta ($A\beta$) protein, $A\beta^{*56}$, to Alzheimer's dementia.

IMAGE IN QUESTION

BLOTS ON A FIELD?

IMAGE IN QUESTION

1 | SPOT THE SIMILARITIES

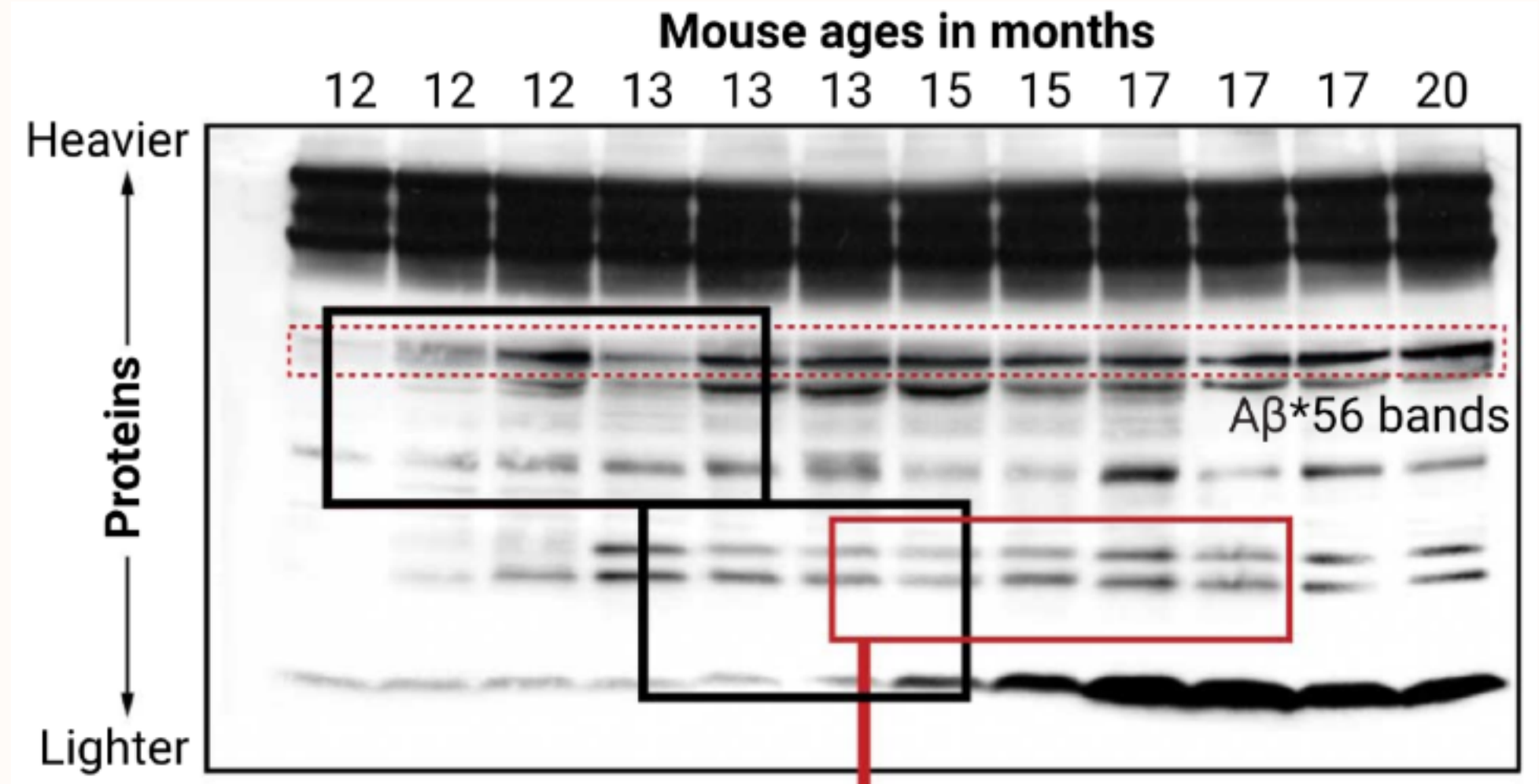
2 | MATCH CONTRAST

3 | COLORIZE & ALIGN

4 | MERGE

5 | CALCULATE SIMILARITY

UNMISTAKABLE DIFFERENCES



[Science, 2022](#)

Ashe uploaded this Western blot to PubPeer after Schrag said the version published in Nature showed cut marks suggesting improper tampering with bands portraying Aβ56 and other proteins (black boxes added by Ashe).

The figure shows levels of Aβ56 (dashed red box) increasing in older mice as symptoms emerge. But Schrag's analysis suggests this version of the image contains improperly duplicated bands.