

News

Former MIT biologist penalized for falsifying data

Faked figures found in seven published papers and five grant applications.

Eugenie Samuel Reich



MIT dismissed Van Parijs in 2005 after he admitted falsifying data. MIT

The US government has closed its case on Luk Van Parijs, an immunologist sacked by Cambridge's Massachusetts Institute of Technology (MIT) in 2005 after he admitted to falsifying data.

Van Parijs, who was an associate professor of biology at MIT, falsified data in five grant applications and ten scientific manuscripts, seven of which were published, according to a notice in the [Federal Register](#) on 23 January. He also included false data in an unpublished book chapter and several presentations. There is no evidence that anyone else was involved in his misconduct.

Van Parijs has agreed not to participate in any work funded by the US government for five years, a severe sanction compared with the one to three years usually imposed in US misconduct cases.

"The misconduct was spread over many issues and many years," says John Dahlberg, a virologist and director of the Division of Investigative Oversight at the Office of Research Integrity (ORI), the organization that investigates research misconduct for the US National Institutes of Health. "We waited until it was all put together and said this is worthy of an increased punishment."

Van Parijs was trained in immunology but then moved into the cutting-edge field of RNA interference, using viruses to inactivate genes and study the effects on cancer cells. He no longer works in scientific research and did not respond to voicemail or e-mail interview requests from Nature News.

Falsified figures

The ORI reached 11 findings of misconduct from its own analysis and from investigation reports from three institutions at which Van Parijs had worked over an eight-year period; MIT, the California Institute of Technology (Caltech) in Pasadena, and Brigham and Women's Hospital, which is affiliated to Harvard Medical School.

According to the Federal Register notice, Van Parijs faked a number of figures, including flow cytometry plots that showed the expression of various cellular proteins. On several occasions he used data acquired from experiments with one population of cells to represent experiments with cells from another population.

The investigation reports have not been released, but a former member of Van Parijs's lab, who asked not to be named, told Nature News that Van Parijs was first accused of misconduct in 2004. Van Parijs had apparently attributed results presented at an MIT symposium to two postdocs who had not obtained them. When four postdocs and a graduate student challenged Van Parijs, he was unable to explain why he'd made the claims, so they notified MIT.

In response to these allegations, the MIT closed Van Parijs's lab, terminated relevant grants and stopped the submission of papers, but kept him on the faculty. Finally, in October 2005, the university announced that Van Parijs had been [fired](#) after admitting that he had falsified data "in a paper and several [unpublished] manuscripts and grant applications".

Knock-on effects

Several authors and journals have since retracted data that had been falsified by Van Parijs. But so far four articles published in the journal *Immunity*^{1,2,3,4} and identified as containing fraudulent work in the Federal Register remain uncorrected.

For instance, Van Parijs and others published images in the *Journal of Immunology* in which they represented the results of a test for the proteins, Bcl-2 and β -actin⁵. Van Parijs then used the same images in a paper published by *Immunity*⁴, but saying that they came from tests for different proteins, Ras and Ras-GTP. Although the *Journal of Immunology* paper has since been corrected⁶ in connection with a separate irregularity introduced by Van Parijs, the *Immunity* paper has not.

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Caltech says that David Baltimore, Van Parijs' former postdoc supervisor, asked for corrections to two papers^{2,3} in 2007, but nothing appeared in print. Peter Lee, the managing editor of *Immunity*, would not comment on the status of these papers.

Meanwhile, Van Parijs's work continues to be cited by other scientists. John Krolewski, a researcher at the University of California, Irvine, unknowingly cited one of the implicated articles³ in a recent review on prostate cancer. He says that "it would be good to have the article flagged".

Including falsified data in a grant application is a felony, and in 2005, Eric Poehlman formerly a researcher at the University of Vermont, was sentenced to a year in jail for fraud.

As a junior professor, however, Van Parijs may have escaped prosecution in part because he was only just starting to raise funding for his own lab, says Dahlberg. The grants he applied for fraudulently had been awarded recently — so were largely unspent — and other grants that included his falsified data had been signed off by senior colleagues. But prosecutors, Dahlberg notes, are most interested in pursuing bigger fraud cases in which many applications have been signed by the guilty party.

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