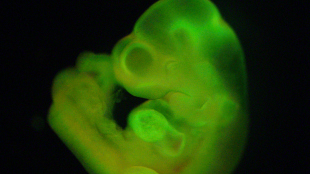
**Article from The-Scientist.com**

Stress-Induced Stem Cell Method Questioned

**Researchers report difficulty replicating the results of studies touting a new method to reprogram stem cells.**

By Tracy Vence | February 19, 2014

HARUKO OBOKATA

When a team led by investigators at the RIKEN Center for Developmental Biology in Kobe, Japan, reported a [new method to reprogram stem cells](http://www.the-scientist.com/?articles.view/articleNo/39025/title/New-Method-for-Reprogramming-Cells/) using an external stressor, such as an acid bath or a mechanical squeeze, several researchers and media reports marveled at the simplicity of their approach. But anecdotal evidence from stem cell researchers trying to replicate the results of the two *Nature* studies published last month (January 29, 2014) indicates that reproducing stimulus-triggered acquisition of pluripotency (STAP) is anything but easy.

“A lot of people have been trying [to replicate the studies’ results], but I have not heard any positive results yet,” said [Sheng Ding](http://gladstoneinstitutes.org/scientist/ding), a stem cell researcher at the Gladstone Institutes in San Francisco, who did not participate in the work and has not himself attempted to reproduce STAP. “But it’s early. It has only been a few weeks.”

Researchers who have tried to follow the published protocol have reported trouble with the method. “The groups that published these papers spent years and years trying to get this to work, in various forms and with different cells, so it may just be that it’s an unusual situation to actually get it to work,” said the University of California, Davis’s [Paul Knoepfler](http://www.ucdmc.ucdavis.edu/cellbio/faculty/knoepfler/), who also has not yet attempted STAP. “In some cases, the devil is in the details and sometimes, if other labs don’t have the detailed, step-by-step protocol, it can be hard to reproduce experiments.” He and others anticipate the publication of detailed STAP methods.

In the three weeks since the papers were published, Knoepfler has been [polling readers of his blog](http://www.ipscell.com/2014/02/stap-stem-cell-update-2-0-method-isnt-working-so-far-investigations-more/), asking whether they “believe” in STAP stem cells. And the responses he’s collected so far illustrate a precipitous decline in trust of the original results. Knoepfler has also been tracking stem cell researchers’ self-reported replication efforts. The scientific rigor of these efforts has varied, researchers have used different cell types, and teams could opt to share data anonymously on Knoepfler’s site. Of the [10 who have submitted](http://www.ipscell.com/stap-new-data/) to date, none have been able to replicate the original results. And 10 “prominent stem-cell scientists who responded to a questionnaire from *Nature*” have also indicated difficulty reproducing the results, [*Nature News*](http://www.nature.com/news/acid-bath-stem-cell-study-under-investigation-1.14738) reported, adding that one of the study’s coauthors, Teruhiko Wakayama, was himself having trouble with STAP.

“If it’s really real, people should be able to replicate it,” said Ding. “Some labs, including ours, will continue to try. . . . It’s still early; we certainly need to give them the benefit of the doubt.”

Haruko Obokata, lead author of both STAP studies, did not respond to *The Scientist*’s request for comment.