STICKY SCIENCE

IF WE COULD JUST GET IT OUT OF THE JAR

REMEMBER THAT ad for Krazy Glue that showed a husky worker suspended from an I-beam by a squirt of adhesive on his hard hat? Now scientists say they've found bacteria able to make a glue at least twice as strong as the world's best.

Yves Brun, an Indiana University bacteriologist, found the glue by chance. He was knocking out genes in a water-borne bacterium to see which ones controlled its unusual shape: a thin tail-like stalk at one end with which it grips tight to underwater surfaces (photo). To find out if he had snipped the right gene, he tried to rinse the microbes off a surface—but they wouldn't budge, even under intense water pressure. When Brun called in experts from Brown University to measure the force needed to unstick the bacteria, they realized they had found a new superglue.

The bacteria should be easy to breed in order to make a commercial adhesive, adds Brun. Since the biodegradable glue works when wet, surgery looks to be a promising market. Brun is now doing further genetic work to get the bug to make more of the adhesive. He also hopes to figure out how to keep the glue from sticking to the containers in which it's made. —Michael Arndt