New antibiotics produced by surprisingly simple method

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

Slava Epstein works in aggressively low-tech quarters at Northeastern University. You might expect otherwise, given the extraordinary work that he and his colleagues are doing, discovering new kinds of antibiotics that are fundamentally different than the ones doctors prescribe today.

Bacteria make antibiotics naturally, which means that if you can grow new bacteria in a lab, the microbes can offer up new drugs. Unfortunately, for the past century, microbiologists have failed to unlock the secret to cultivating the vast majority of bacterial species.

Now Epstein and his colleagues have found a way to make many of them thrive.

"Everyone thought the solution would be high-tech," said Epstein. But the one that he and his colleagues have found is remarkably straightforward. They raise bacteria by giving them a comfortable place to grow — a disk or a box will do. A company they founded, called NovoBiotic, is now testing the antibiotics made by the bacteria in the hopes of putting them into clinical trials.

Epstein started out studying invertebrate animals, but soon his attention shifted to microscopic organisms, such as protozoans and the bacteria they hunted. "I was getting interested in progressively smaller and smaller organisms because they appeared to be more important to me," Epstein said. "The rest just seemed to be a consequence of what the smaller bugs were doing."

Read full, original post: A radically simple idea may open the door to a new world of antibiotics