

Connections Biology's next revolution

Nigel Goldenfeld¹ & Carl Woese²

1. Nigel Goldenfeld is in the Department of Physics and Institute for Genomic Biology, University of Illinois at Urbana-Champaign, 1110 West Green Street, Urbana, Illinois 61801, USA.
2. Carl Woese is in the Department of Microbiology and Institute for Genomic Biology, 601 South Goodwin Avenue, Urbana, Illinois 61801, USA.

Top of page

Abstract

The emerging picture of microbes as gene-swapping collectives demands a revision of such concepts as organism, species and evolution itself.

One of the most fundamental patterns of scientific discovery is the revolution in thought that accompanies a new body of data. Satellite-based astronomy has, during the past decade, overthrown our most cherished ideas of cosmology, especially those relating to the size, dynamics and composition of the Universe.

<http://www.nature.com/nature/journal/v445/n7126/full/445369a.html>