

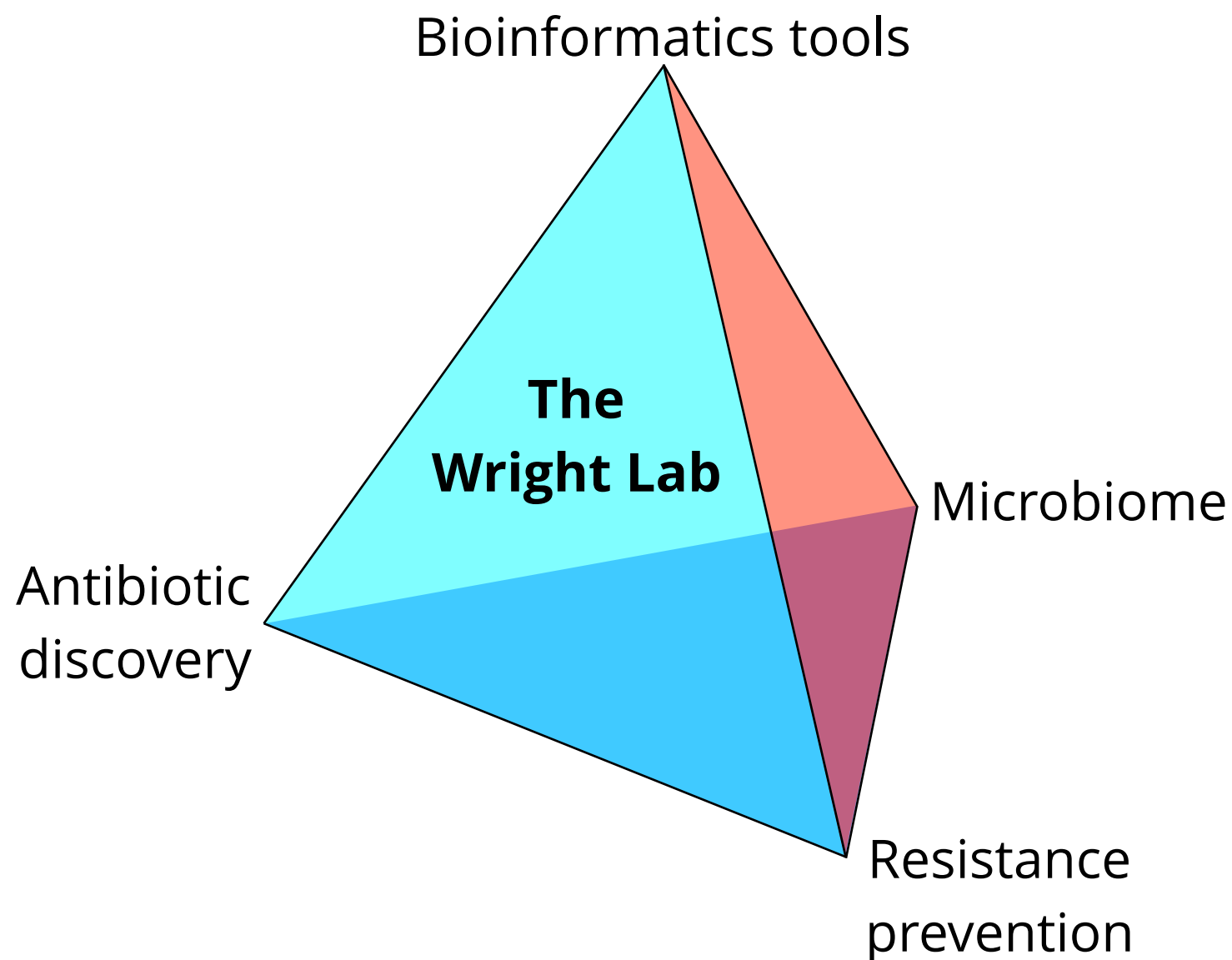


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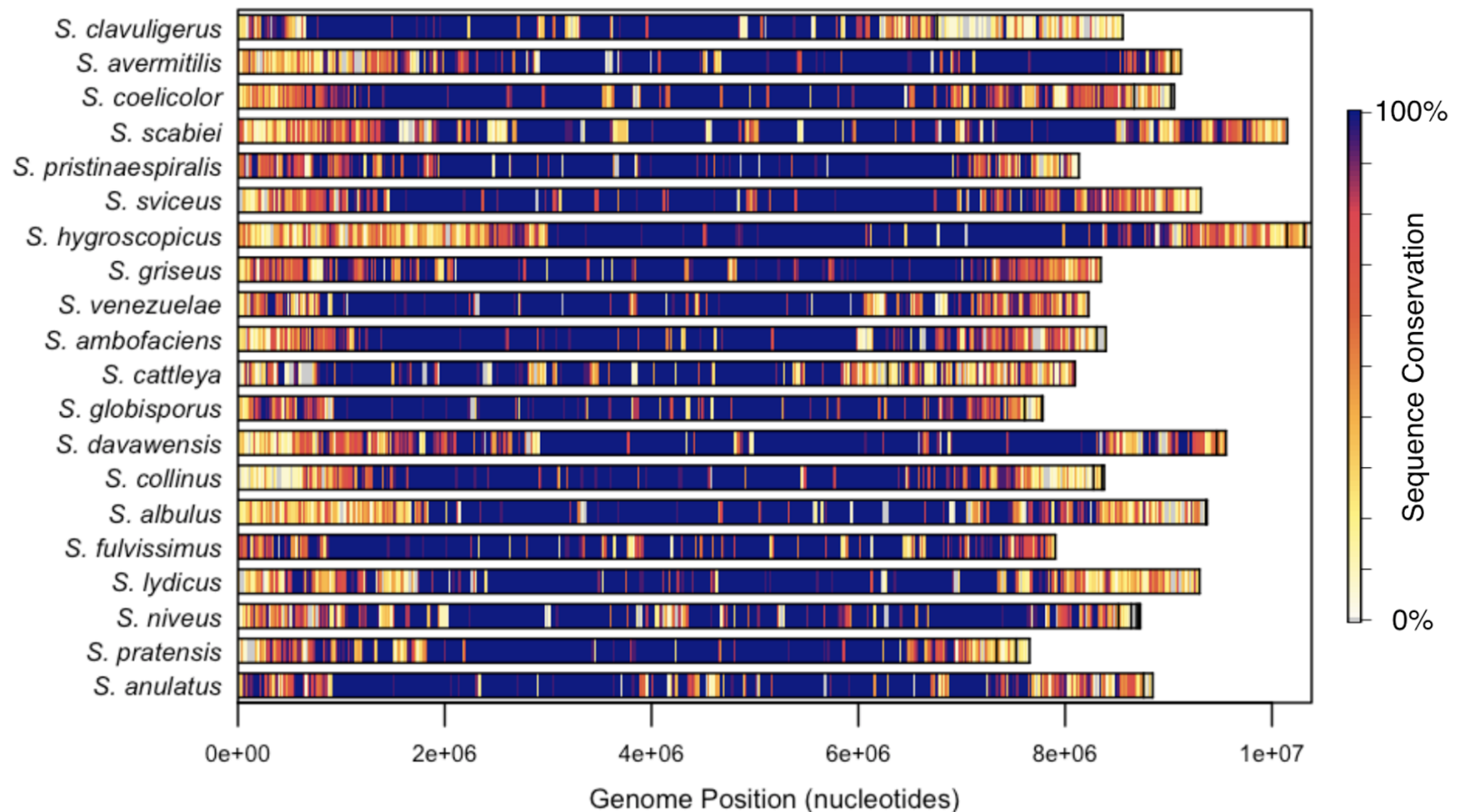
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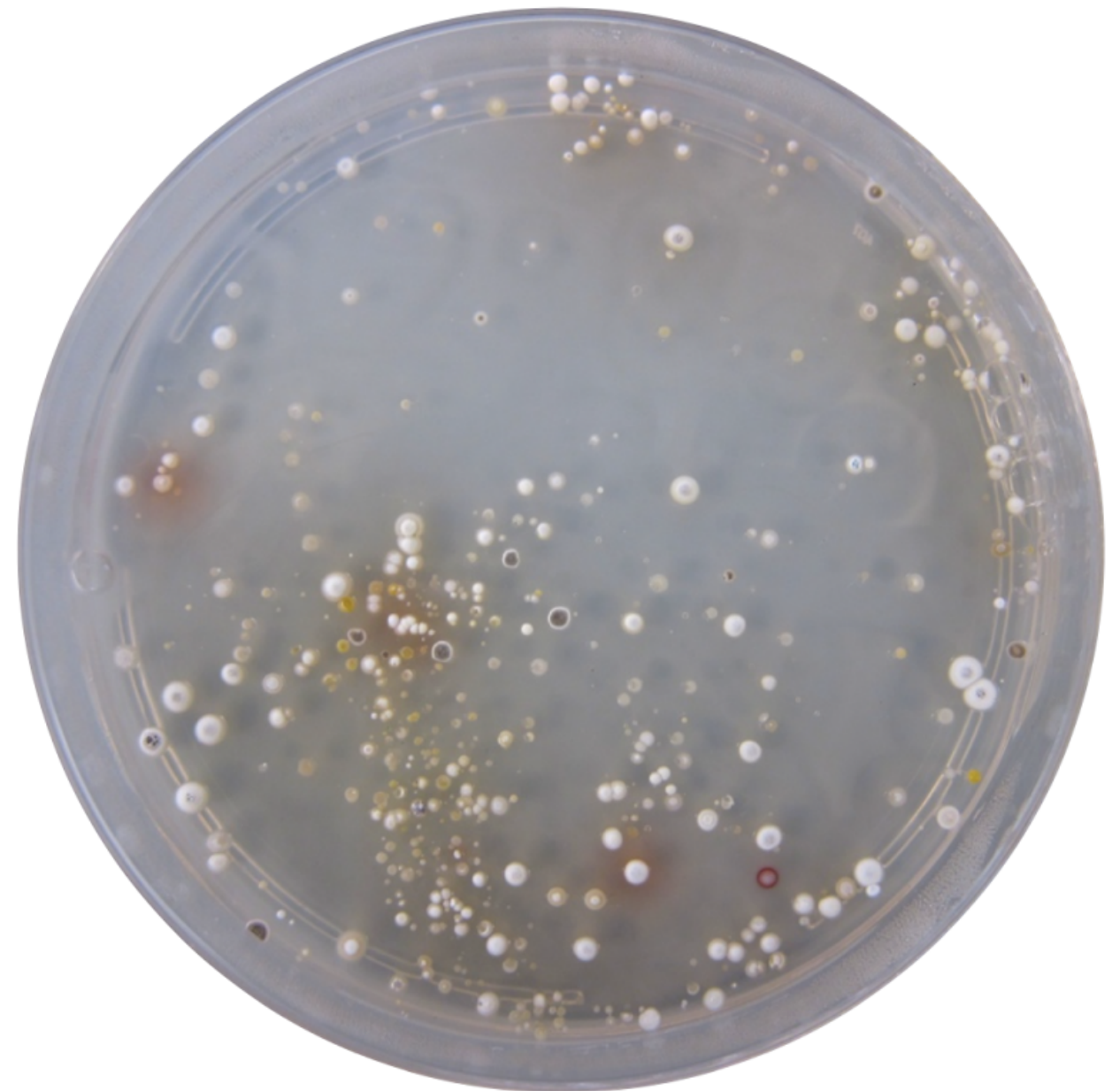
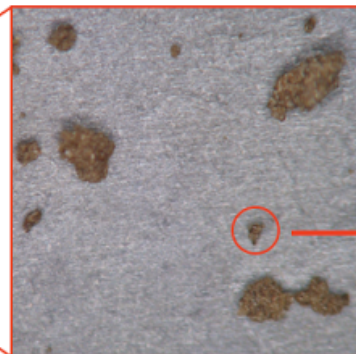
How do naturally antibiotic producing bacteria ward off resistance in their competitors?

Mining the genomes of antibiotic producing microorganisms to discover new antibiotic treatments.



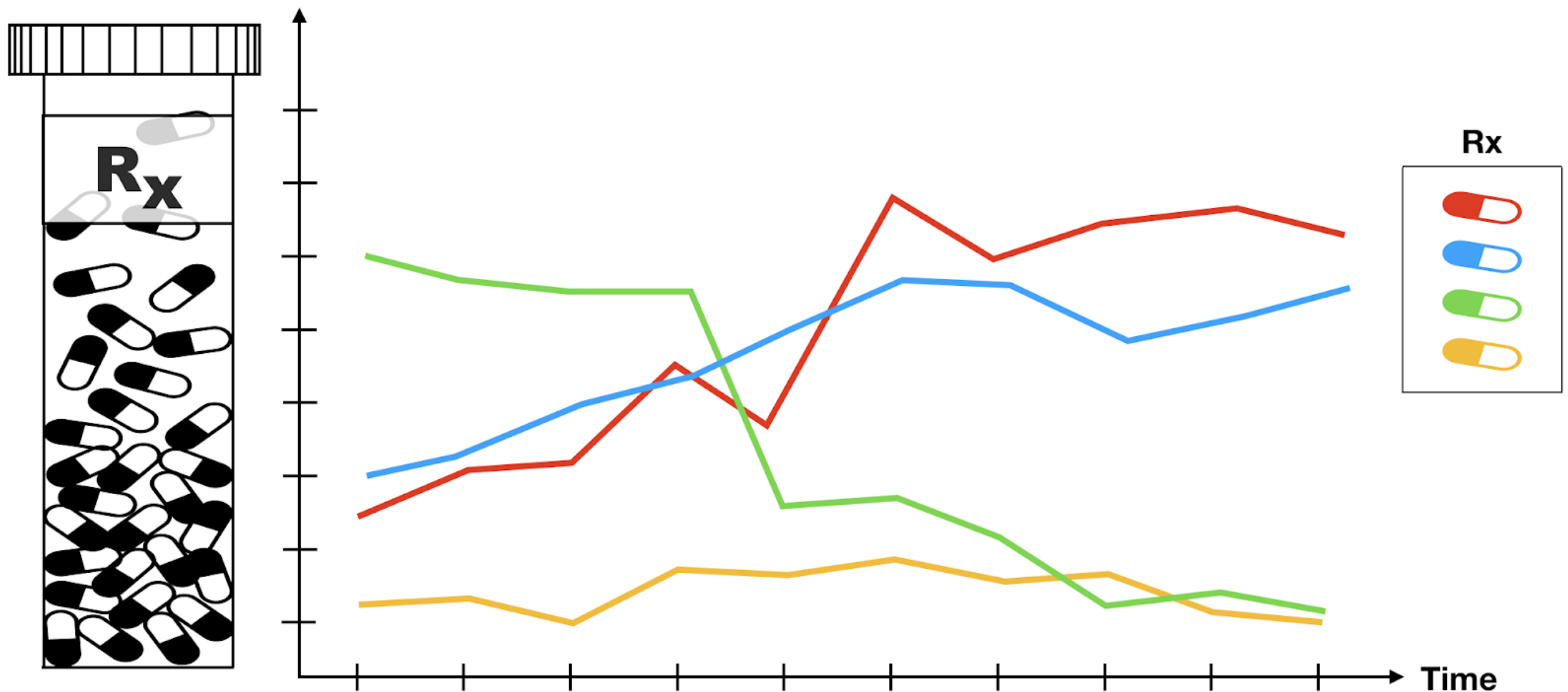
How does the physical landscape shape the metaphorical adaptive landscape?

Studying the ecology and evolution of microorganisms in their natural context and in engineered 3D environments.



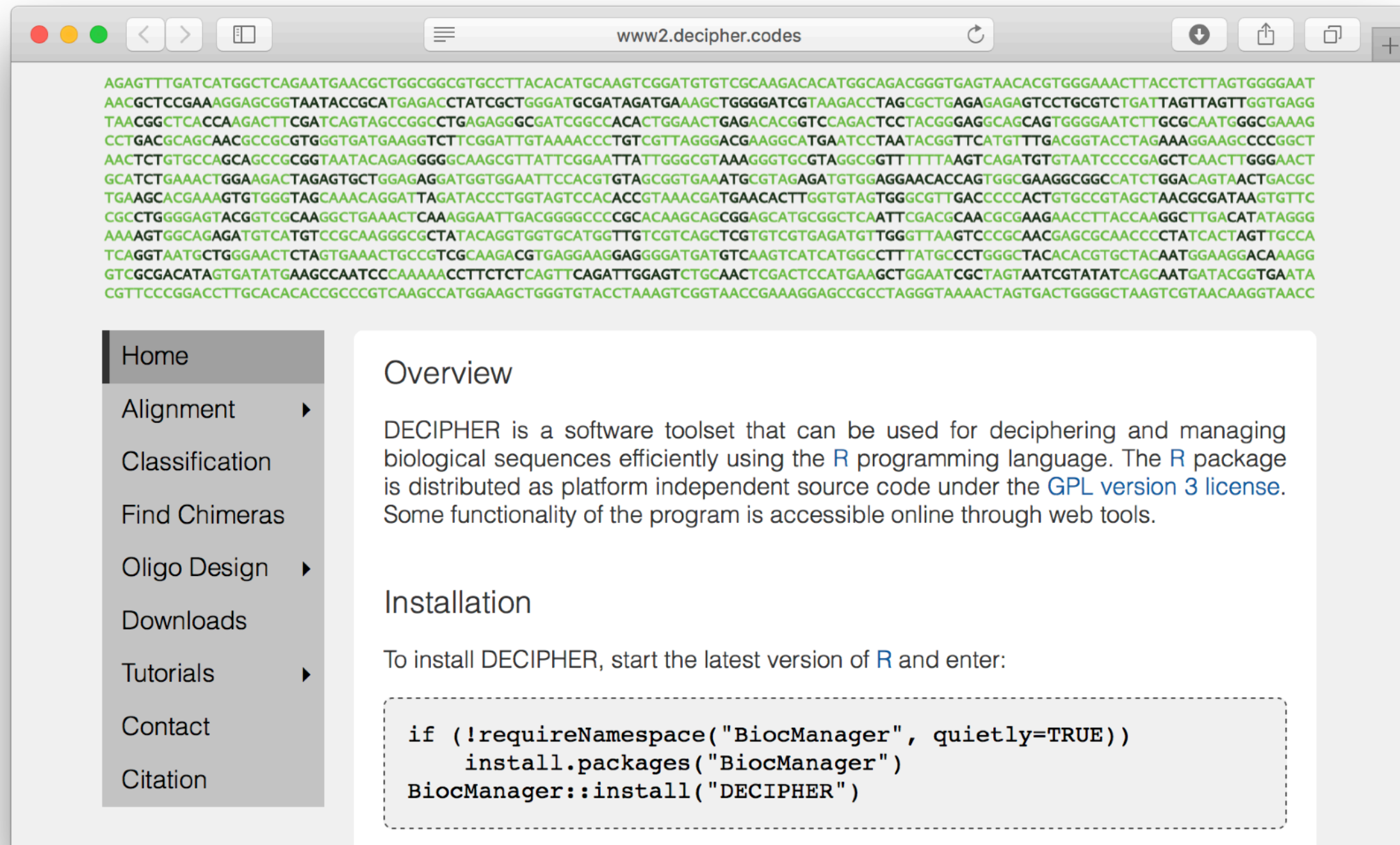
What is the optimal way to treat multi-drug resistant infections in the clinic?

Mining electronic health records for insights into how we can better conduct antimicrobial stewardship.



What powerful insights can we draw from tens of thousands of microbial genomes?

Developing the next generation of bioinformatics tools for mining thousands of microbial genomes.



The screenshot shows a web browser window with the address bar displaying `www2.decipher.codes`. The main content area displays a long DNA sequence in green text. Below the sequence is a navigation menu with the following items: Home, Alignment, Classification, Find Chimeras, Oligo Design, Downloads, Tutorials, Contact, and Citation. The 'Overview' section is visible, describing DECIPHER as a software toolset for deciphering and managing biological sequences using the R programming language. It mentions that the R package is distributed as platform-independent source code under the GPL version 3 license. The 'Installation' section provides instructions on how to install DECIPHER using R, with a code block showing the necessary R commands.

```
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CGTTCCCGGACCTTGACACACCGCCCGTCAAGCCATGGAAGCTGGGTGTACCTAAAGTCGGTAACCGAAAGGAGCCGCTAGGGTAAACTAGTGACTGGGGCTAAGTCGTAACAAGGTAACC
```

Overview

DECIPHER is a software toolset that can be used for deciphering and managing biological sequences efficiently using the [R](#) programming language. The [R](#) package is distributed as platform independent source code under the [GPL version 3 license](#). Some functionality of the program is accessible online through web tools.

Installation

To install DECIPHER, start the latest version of [R](#) and enter:

```
if (!requireNamespace("BiocManager", quietly=TRUE))
  install.packages("BiocManager")
BiocManager::install("DECIPHER")
```