47-2019-10825 | High Throughput Screening of Antimicrobial Agents Using Microfluidics

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Category	Life Science and Biotechnology
Keywords	Microfluidics, high throughput screening, synergism, Biocontrol
Current development stage	General list: TRL1 Basic Principles Observed
Collaboration Opportunity	Sponsored Research with an option to License Research Results

Background

Numerous bacteria harbor genes that encode for novel antimicrobials. A major barrier to characterizing and utilizing these novel antimicrobials is that bacteria typically do not produce them under standard laboratory conditions. Rather, they are produced only in response to the presence of specific competing bacterial species and/or chemical conditions. Therefore, a systematic way of exploring combinations of bacterial species under different environmental conditions may elicit the production of novel antimicrobials and may be of commercial value.

Our Innovation

By using a specifically designed microfluidics system, the researcher is able to generate hundreds of thousands of combination of bacteria and chemical agents, and screen these combinations for ones that suppress a bacterial pathogen's growth.

Opportunity

The researcher is offering his research capabilities to parties interested in identifying novel antimicrobials via Sponsored Research Projects.

Patent Status

Contact for more information:

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