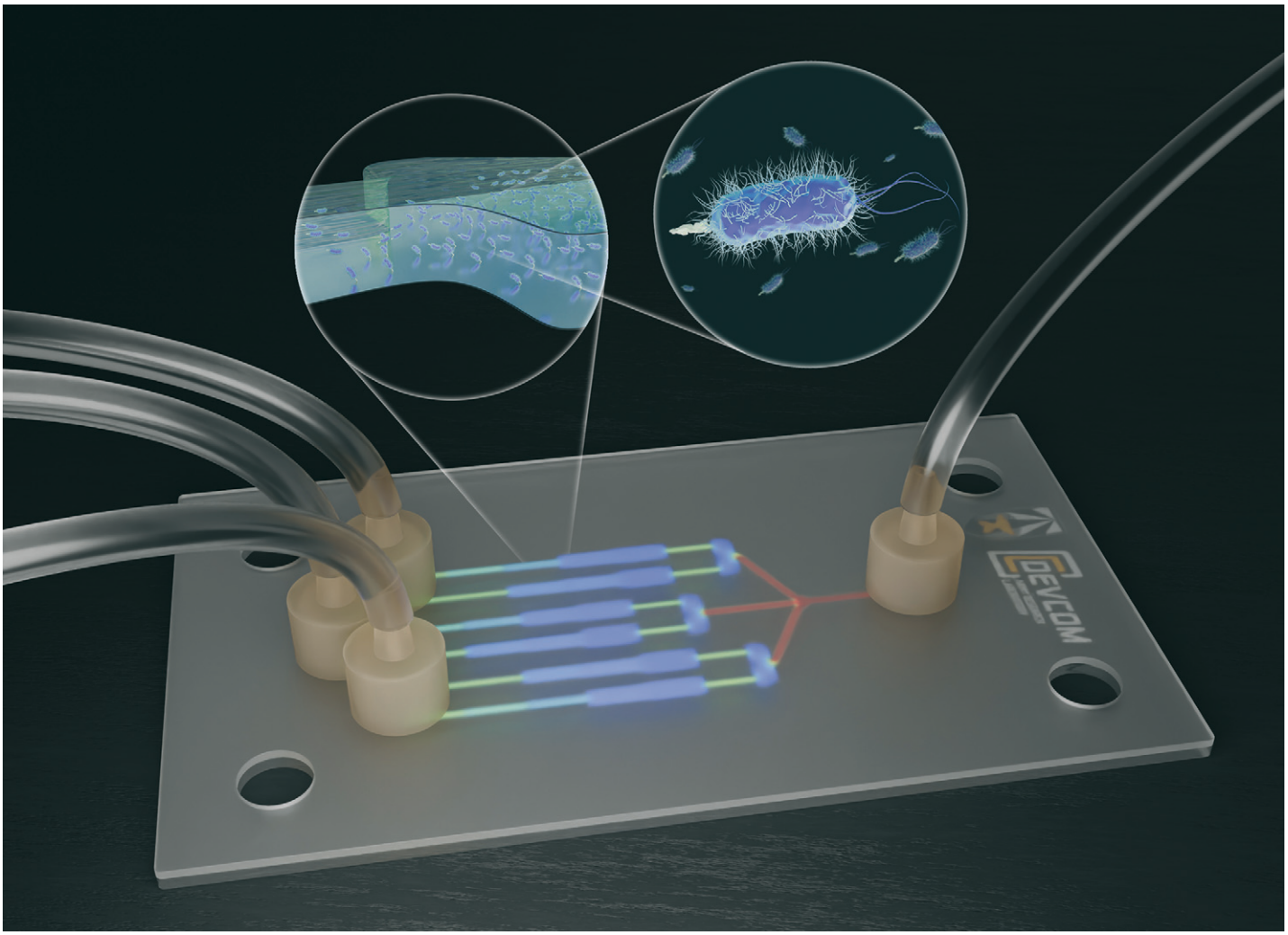

Showcasing research from Dr. Jose A. Wippold's microfluidic laboratory, Biological and Biotechnology Sciences Division, U.S. Army Research Laboratory, Department of Defense, USA.

Kappa(κ)Chip: a modular microfluidic device for analyte screening using parallelized assays and a multiple shear rate approach

Meet the kappa(κ)Chip. A novel microfluidics-based device to rapidly screen the adhesive properties of libraries of synthetically engineered proteins and peptides, at lower than traditional costs, and in a reproducible manner. The Army Research Laboratory developed the kappa(κ)Chip to address a critical need in the field of Synthetic Biology – a high-throughput screening method which can be used on a wide range of substrates, and for adhesive discovery, bioexploration, and understanding the behaviour of cells under shear flow.

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As featured in:

See Jose A. Wippold *et al.*, *Lab Chip*, 2025, **25**, 5439.

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