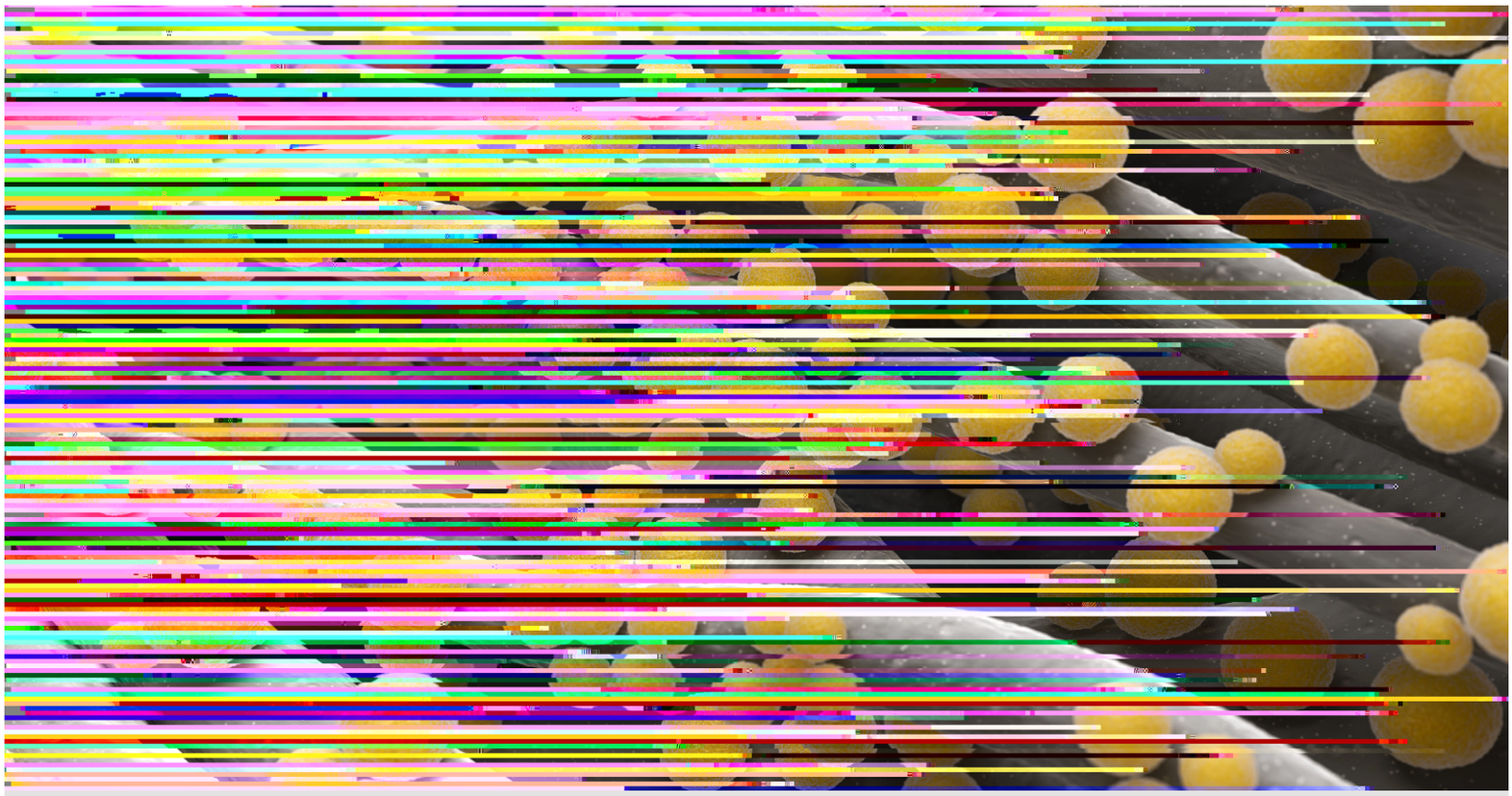

Background

Staphylococcus aureus is a commensal gram-positive bacterium which can cause a wide range of human diseases, including cellulitis, necrotizing fasciitis, pneumonia, infective endocarditis, bacteremia, and toxic shock syndrome. The ease with which S. aureus acquires antibiotic resistance means that treatment failure is increasingly common. The need for new clinical management approaches has significantly increased the investment and interest in alternate methods of treating and preventing S. aureus infections, including prophylactic vaccination.

Development of an e□ective vaccine for S. aureus has been a continuing e□ort over the past two decades, as yet with no success. The main strategy behind most vaccines for S. aureus that have failed in the clinic has been to elicit a humoral antibody response to clear the bacteria via opsonophagocytosis. It has become apparent that this approach **does not work.**

Technology

Our approach is to target staphylococcal superantigen-like (SSLs) proteins using a fusion protein comprising three key SSLs. SSLs are universally conserved virulence factors which are secreted by S. aureus. Our vaccine generates neutralising antibodies which act on these secreted virulence factors, preventing S. aureus from evading the immune system and establishing infection.

Major advantages

- Targets secreted immune evasion factors – aims to neutralize staphylococcal virulence rather than providing sterilizing immunity.
- Focuses on virulence factors that are immune inhibiting (help the pathogen escape the immune

Contact

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