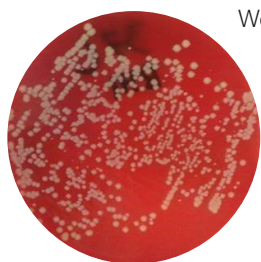


Research Suggests Early Detection of Staphylococcal Toxins Will Protect Patients in Intensive Care

Normally harmless bacteria can produce toxins when patients are in Intensive Care following injury or illness. Researchers at Lancaster University are developing new tools to detect infection earlier to prevent serious illness for vulnerable patients.



Work by Dr Bob Lauder and his colleagues at Lancaster University is exploring the potential to use Staphylococcal toxins as a marker of *Staphylococcus aureus* (S.aureus) presence in intensive care patients. S.aureus is found on around half of the general population, but it is associated with serious illness and significant complications for patients in the Intensive Care Unit.

In collaboration with clinicians at the local hospital trust his team which includes Dr Lisa Bishop and students Francis Price and Kirsty Bull, has been working to develop diagnostics for the early detection of infection.

His work is suggesting that while half of us have this bacteria on our skin we are able to deal with it very effectively, however when patients are in ICU, following injury or some other illness, the bacteria starts to produce toxins which can cause a serious deterioration in a patients condition. This may be because those patients who are already very ill are unable to deal effectively with the toxins.

Dr Lauder told us "We are seeing much higher levels of toxins in people in ICU than in the general population but with our new tools we can detect infection much sooner. Being able to diagnose problems early allows opportunities for early intervention when it is possible to prevent the potentially catastrophic outcomes of S.aureus infection."

Students undertaking degrees in the Faculty of Health and Medicine can have an opportunity to undertake project work with Dr Lauder, and help his group make a difference to the health and recovery of patients in ICU.

For more details about this report or about Biological Sciences, Ecology, Conservation and Environmental Biology courses on offer at Lancaster University please contact the Biology Admissions Staff.

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