Tulane testing new ‘drop-of-blood’ diagnostic device for trauma patients

October 2nd, 2025

|

Stacey Plaisance splaisance@tulane.edu

View PDF

Damir Khismatullin is leading the team of biomedical engineers creating a device that can quickly identify dangerous blood-clotting issues in trauma patients using only a drop of blood—an innovation that could save lives when every second matters. (Photos by Kenny Lass)

Tulane University biomedical engineers are developing a new device to rapidly detect life-threatening blood-clotting problems in trauma patients using just a single drop of blood.

It’s a potentially life-saving advancement for cases of severe injury, where every minute counts as emergency teams work to stop bleeding and assess a patient’s coagulopathy, a condition that can cause excessive bleeding or

blood clots due to defects in the body's clotting process.

There is currently no reliable or fast way to perform such tests in emergency settings, said Damir Khismatullin, associate professor of biomedical engineering in Tulane's **School of Science and Engineering**.

Read more.