

Researchers report novel method to quickly make therapeutic proteins from human blood

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Personalized [medicine](#) has incredible potential, but current approaches are still too expensive and time-consuming to have a big impact.

A new paper in *Scientific Reports* looks at how to extract cellular protein synthesis machinery from human blood, and, by adding recombinant DNA to the extract, to produce [therapeutic proteins](#) within two hours.

Govind Rao, director of the Center for Advanced Sensor Technology, and professor of chemical, biochemical, and [environmental engineering](#) at UMBC, and one of the authors of the paper, describes this research as a milestone in personalized medicine. He notes that his team's goal is to "allow anyone's blood to be used to make medicines, treatments, and vaccines specifically for them."

More information: David Burgenson et al. Rapid recombinant protein expression in cell-free extracts from human blood, *Scientific Reports* (2018). [DOI: 10.1038/s41598-018-27846-8](https://doi.org/10.1038/s41598-018-27846-8)

Provided by University of Maryland Baltimore County

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