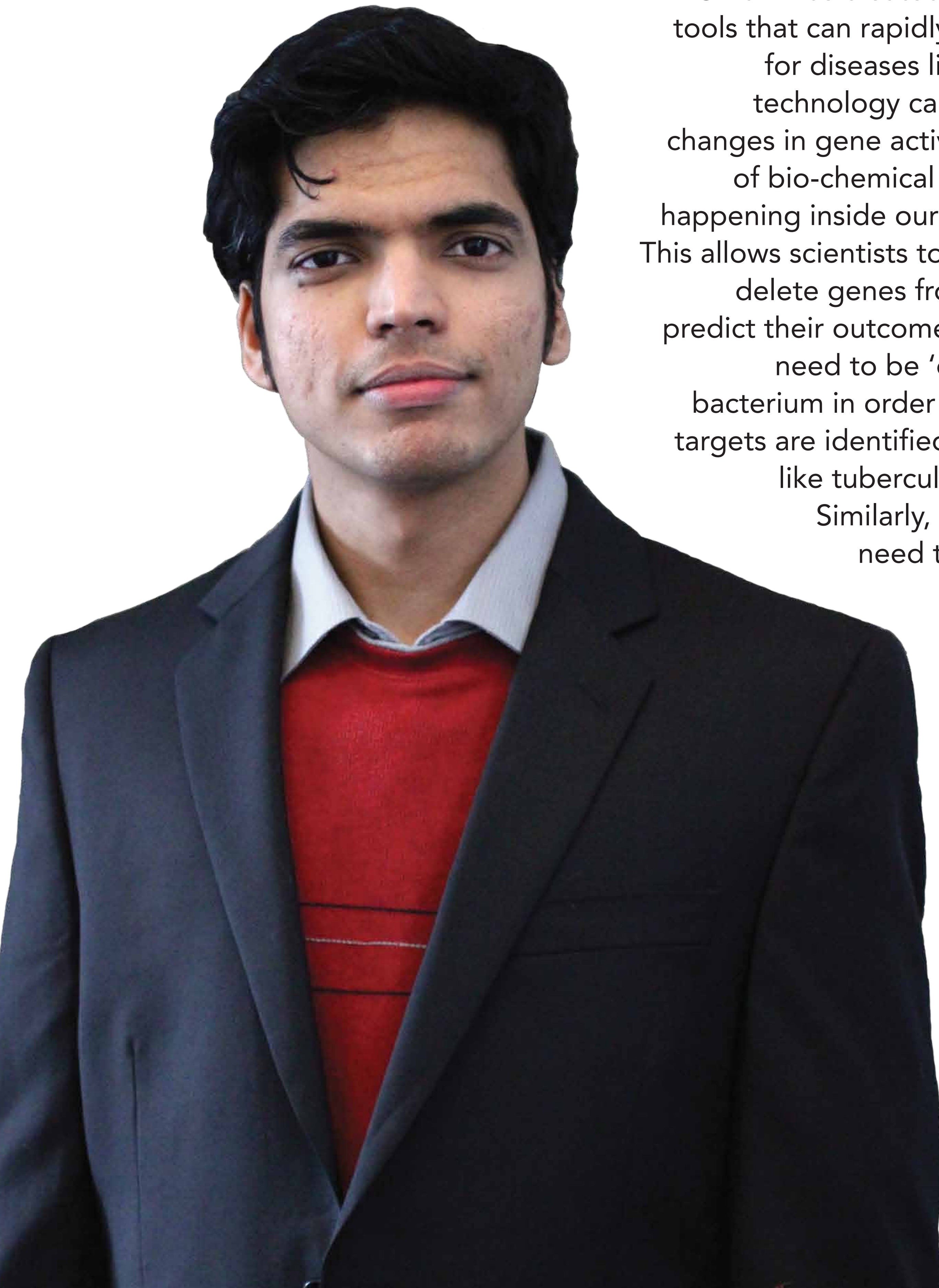


# LEMELSON-MIT

*\$30,000 Illinois Student Prize*



Sriram has created versatile computational tools that can rapidly search for drug targets for diseases like tuberculosis. His new technology called PROM predicts how changes in gene activity affect the thousands of bio-chemical transformations that are happening inside our body or inside bacteria. This allows scientists to computationally add or delete genes from the DNA of cells and predict their outcomes. By finding genes that need to be 'deleted' in a pathogenic bacterium in order to kill it, candidate drug targets are identified for microbial infections like tuberculosis with great accuracy.

Similarly, one can infer genes that need to be added or modified to increase biofuel production using PROM. This can also serve as a designing tool for genetically engineering bacteria.

2012 FINALIST

**SRIRAM**CHANDRASEKARAN

GRADUATE STUDENT **BIOPHYSICS**