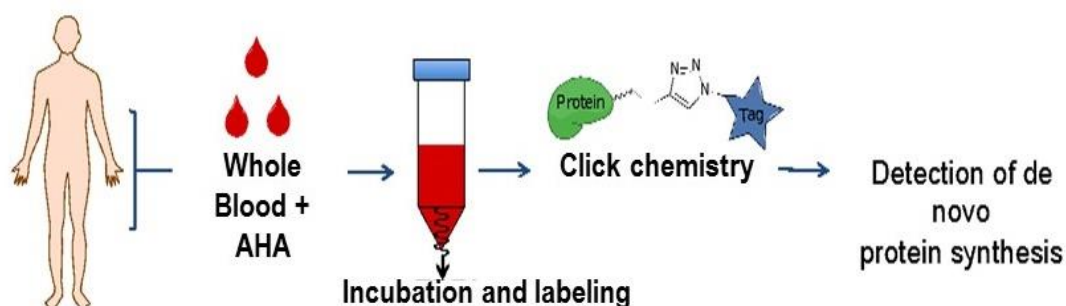


CNS-inStem – NYU researchers develop method to identify newly synthesized proteins in blood

In an international collaborative project with scientists from New York University, [Aditi Bhattacharya](#) of the [Centre for Neurodevelopmental Synaptopathies \(CNS\)](#) at Institute for Stem Cell Science & Regenerative Medicine (inStem), Bengaluru along with Chhaya Patole of Mass Spectrometry Facility at the Bangalore Life Science Cluster (BLSc), Bengaluru, have developed a method to incubate, label and then detect newly synthesized proteins in freshly collected blood via mass spectrometry. Testing the proof of concept in mice and rat blood, the group was able to identify proteins from erythrocytes, lymphocytes, and platelets in samples. Read about the proteomic work done in this project that has adopted cutting edge peptide identification algorithms to enhance peptide detection [here](#).



The ability to test proteomic changes in the blood dynamically has critical implications to the discovery and tracking of biomarkers for a variety of metabolic, myeloid and infectious diseases. The biomarkers can range from detection of viral/bacterial peptides to validating whether a specific biochemical pathway has been engaged by a given drug as a part of treatment efficacy monitoring. However, to date it has been cumbersome to identify newly synthesized proteins from whole blood derived from usual blood collection methods.

A website report titled '[CNS,inStem – NYU Researchers Develop Method to Identify Newly Synthesized Proteins in Blood](#)' based on Dr. Aditi Bhattacharya's latest work published in *Journal of Proteome Research*, Aug 2020.

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