

DRUG REPURPOSING:
AN EXPLORATORY AND
COMPARATIVE STUDY OF
FDA-APPROVED DRUGS
AS INHIBITORS FOR
BREAST CANCER
PROTEINS





OLEH PRECIOUS
MSc. Biochemistry

**Role: Molecular docking and
Publication**

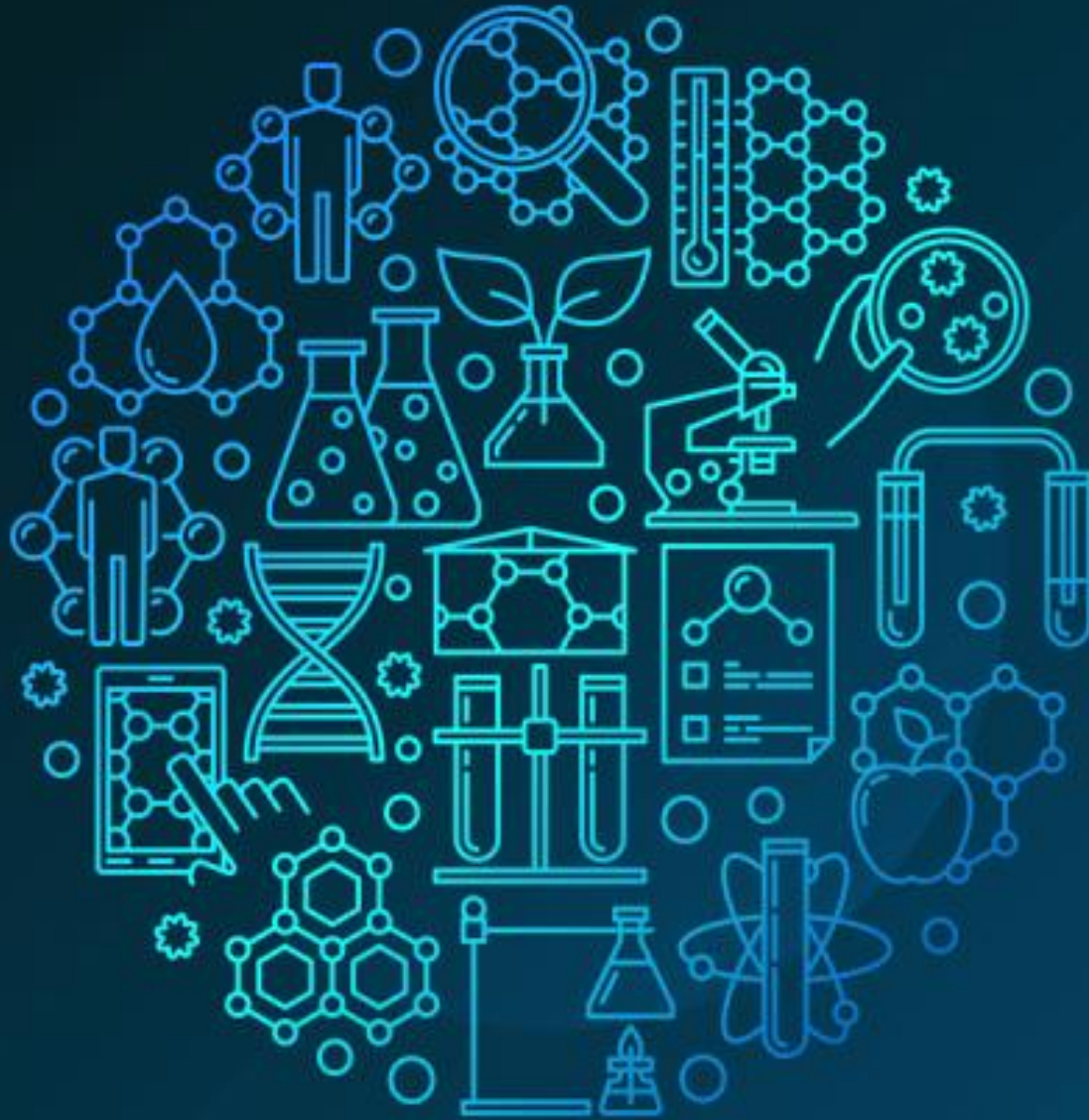


BEZALEEL AKINBAMI
MSc. BIOINFORMATICS

**Role: Molecular docking and
Publication**



INTRODUCTION

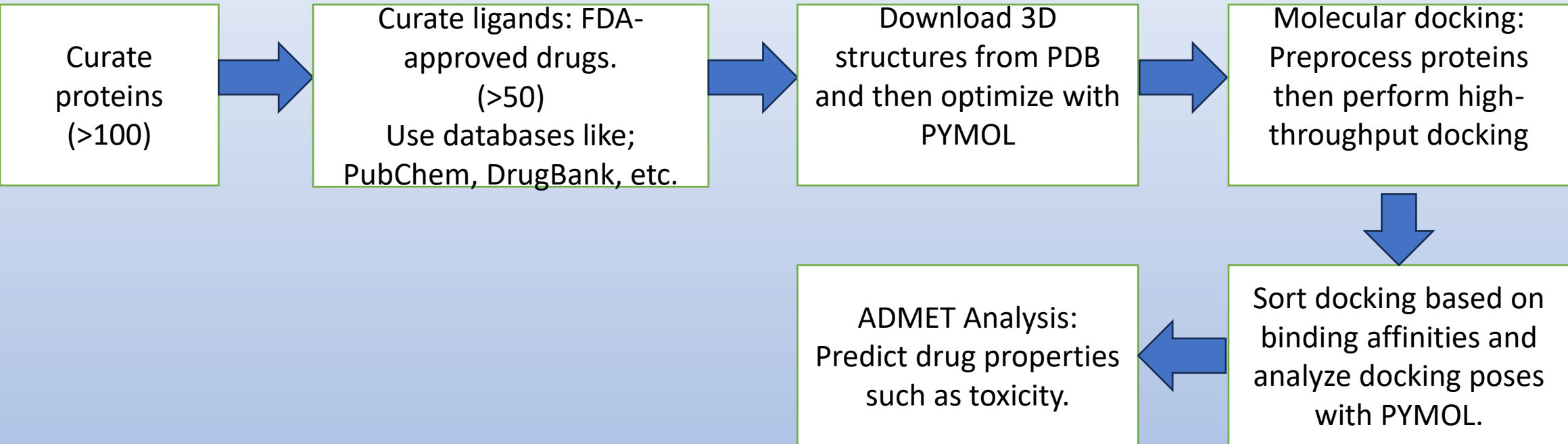


- Cancer is a disease caused by the uncontrolled growth of abnormal cells that can invade nearby tissues and spread to other parts of the body.
- According to GLOBOCAN, breast cancer is the leading cause of cancer-related deaths among women and the second most common cause of cancer deaths overall.
- An effective approach to drug development is drug repurposing, which identifies new uses for existing drugs originally developed for other conditions.

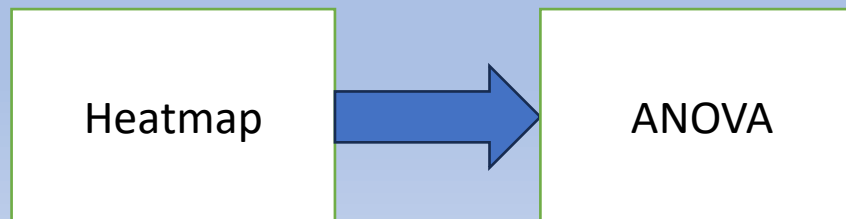


METHODOLOGY

IN SILICO DRUG DISCOVERY WORKFLOW



STATISTICAL ANALYSIS



EXPECTED OUTCOME

- Discover potential drugs for repurposing
- To determine the binding affinities of these drugs to cancer-related genes
- To determine if there's a significant difference among the group of repurposed drugs.
- To determine if there's a significant difference among the types of protein structures (apo, antagonist, agonist) and the repurposed drugs.
- To determine the repurposed drugs with the least side effects through ADMET prediction



