

Clarisse Ratu Diandra

clarisse14diandra@gmail.com | clarissediandra.github.io | London, United Kingdom

EDUCATION & AWARDS

Biochemistry MBiol, BSc

September 2020 - July 2024

University of Leeds, UK

Molecular Cloning | Advanced Biomolecular Techniques | Biophysical Characterisations

- Classification: High Upper Second-Class Honours
- Dean's List Award (top 5% students): 2021, 2022
- Dean's Excellence Scholarship (exemplary academic performance): 2020, 2021, 2022

A-levels

July 2018 - June 2020

Surabaya Cambridge School, Indonesia

Mathematics | Physics | Biology | Chemistry

- A*A*AA

RESEARCH EXPERIENCE

University of Leeds

October 2023 - May 2024

Characterising Highly Disordered but Conserved Regions of Ire1 Luminal Domain C-terminal for Oligomerisation

- Optimised expression and purification of Ire1 luminal domain variants.
- Utilised Mass Photometry, Flow-Induced Dispersion Analysis, and Nuclear Magnetic Resonance for biophysical characterisation of Ire1 luminal domain to observe conformational and structural changes in response to its ligands.
- Developed refined experimental protocols that enhanced reproducibility and efficiency for parallel experiments.

University of Leeds

October 2022 - March 2023

Investigating HIV-1 Nef Hijacking of Cell Machinery for Pathogenesis

- Characterised HIV-1 Nef's function in CD4 downregulation and interactions with Hck-SH3 protein
- Employed Circular Dichroism, Surface Plasmon Resonance, Nuclear Magnetic Resonance, Confocal Microscopy and Flow Cytometry to explore the importance of Nef in HIV-1 pathogenesis in human cell machinery.
- Formulated critical importance of Nef protein for future therapeutic implications.

University of Leeds

March 2022 - April 2022

Screening of Inhibitors Targeting GSK3 β kinase in Drug Design

- Executed in silico compound screening of inhibitor compound libraries to select the lowest ligand free binding energies.
- Implemented biochemical assays to obtain the IC50 of chosen inhibitors with their target enzyme, GSK3 β kinase.

University of Leeds

October 2021 - November 2021

GFP Gene Expression and EGFP Protein Purification

- Genetically modified *E. coli* (DH5 α) cells by ligating pET28c expression vector with GFP DNA to express GFP gene.
- Performed western blot analysis on purified EGFP protein expression to assess protein quality.

WORK EXPERIENCE

University of Leeds

FBS Student Engagement Intern: International Position

August 2023 - July 2024

- Organised student-led events and hosted activities for 200+ participants.
- Worked with the student support team to promote inclusivity within the community.
- Elevated year-to-year event engagement by 30% through proactive insights and feedback acquisition.

SKILLS

Protein Expression & Purification (Liquid Chromatography & FPLC) | Protein Characterisation Techniques (Flow-Induced Dispersion Analysis, Mass Photometry, Nuclear Magnetic Resonance, Surface Plasmon Resonance, Circular Dichroism) | Plasmid Expression & Purification | Molecular Biology Techniques (PCR, SDS-PAGE, Western Blot, Molecular Cloning, DNA Sequencing) | Cellular Imaging Techniques (Confocal Microscopy, Flow Cytometry) | Drug Design (ArgusLab Software) | Bioinformatics | Data & Statistical Analysis | PyMOL | Detailed Record Keeping | Good Laboratory Practice (GLP) | Benchling | Origin Lab | Fiji | Troubleshooting & Optimisation |

CERTIFICATES

LifeArc Life Sciences: Biology Research Job Simulation

October 2024

- Optimised experimental conditions of fibroblast-to-sensory differentiation protocol.
- Analysed experimental results using RStudio software and logistic regression.

Pfizer UK: Molecule to Market Job Simulation

May 2024

- Researched clinical care pathways and prepared evidence for NICE submission for hypothetical new medicine.
- Created brand positioning statement and effective go-to-market strategy.

ThermoFisher Scientific: Genetic Sciences Job Simulation

February 2024

- Analysed real-time PCR amplification curves and determined cycle thresholds for gene targets in Thermo Fisher.
- Evaluated assay sensitivity, specificity, and positive percent agreements to assess limits of real-time PCR tests.

LANGUAGES

English full professional proficiency, Bahasa Indonesia native, Javanese native

INTERESTS

Painting | 2D Art | Photography | Cross Stitching