

**IN VITRO STUDY OF *LITSEA OPPOSITIFOLIA* STEM EXTRACT ON
THE KERATINOCYTE HACAT CELL LINE THROUGH OXIDATIVE
STRESS RELATED GENE EXPRESSION**



By
Crisshella Hana
19010031

School of Life Sciences
Indonesia International Institute for Life Sciences

In partial fulfillment of the requirements for the degree of
Biomedicine

Jakarta, Indonesia
2023