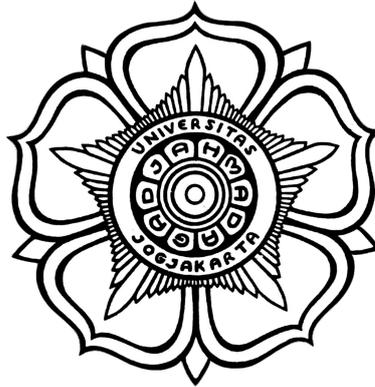


**THE EFFECTS OF VITAMIN D ON SPATIAL MEMORY FUNCTION  
AND NEUN mRNA EXPRESSION IN THE HIPPOCAMPUS OF  
TRANSIENT GLOBAL BRAIN ISCHEMIC INJURY RAT MODEL**  
**Graduating Paper**

Submitted to the Board of Examiners as Partial Fulfillment of Requirement  
of Medical Degree in Faculty of Medicine, Public Health, and Nursing

Universitas Gadjah Mada



By:

MUHAMMAD WISHAL ALBARTS

20/454506/KU/22008

**INTERNATIONAL UNDERGRADUATE PROGRAMME  
FACULTY OF MEDICINE, PUBLIC HEALTH AND NURSING  
UNIVERSITAS GADJAH MADA  
YOGYAKARTA  
2024**

**RATIFICATION PAGE**

**THESIS**

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To Partially Fulfil the Requirements for  
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Submitted by:

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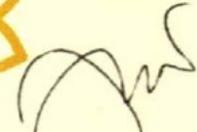
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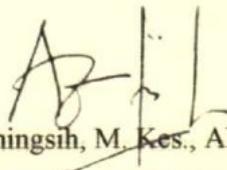
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