



## DR. NOR ZAIHANA BINTI ABDUL RAHMAN

PENSYARAH UNIVERSITI DS13

### CONTACT

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**Faculty:** Fakulti Pergigian

### SUPERVISION

PhD - Completed: 0, Ongoing: 0

Master - Completed: 1,  
Ongoing: 0

## AREAS OF EXPERTISE

Molecular Microbiology

Neurobiochemistry

## ACADEMIC QUALIFICATION

PhD in Pharmacology (2015)

Master in Sains (2010)

B.Sc. in Biotechnology (2005)

## RESEARCH

### 1. DECIPHERING THE RELATIONSHIP BETWEEN ORAL PATHOGEN BURDEN AND COGNITIVE FUNCTION IN YOUNG MALAYSIAN ADULTS: A PILOT STUDY

2026 GERAN PENYELIDIKAN FUNDAMENTAL ON GOING MAIN RESEARCHER

### 2. INHIBITORY EFFECT OF PROBIOTICS AGAINST CANDIDA BIOFILM ON DENTURE SURFACE

2022 BIDUNI MIZANNIYAH COMPLETED MAIN RESEARCHER

### 3. MOLECULAR CHARACTERIZATION OF PROBIOTIC INHIBITION PROPERTIES AGAINST PORPHYROMONAS GINGIVALIS

2019 GERAN KPT COMPLETED MAIN RESEARCHER

### 4. ANTIBACTERIAL ACTIVITY OF LOCAL MALAYSIAN HONEY AGAINST ORAL BACTERIA IN VITRO

2019 GERAN PENYELIDIKAN KHAS COMPLETED CO-RESEARCHER

### 5. ANTIBACTERIAL ACTIVITIES OF SPILANTHOL AGAINST ORAL BIOFILM BACTERIA AND ITS CAPACITY ON MODULATORY GENE EXPRESSION.

2019 GERAN PENYELIDIKAN USIM COMPLETED CO-RESEARCHER

# RESEARCH

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## 6. IDENTIFYING BEST PRACTISES IN TEACHING-LEARNING IN THE INTEGRATION OF NAQLI AND AQLI KNOWLEDGE

2018 PENYELIDIKAN TANPA BIAYA COMPLETED CO-RESEARCHER

## 7. DEVELOPMENT OF PROBIOTICS FOR CARRIES PREVENTION

2016 GERAN PENYELIDIKAN TRANSLASIONAL COMPLETED MAIN RESEARCHER

# PUBLICATION

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## 1. OROGENYX: RESTORING ORAL HEALTH

INNOVATION BANK CHALLENGE

2025 PROCEEDING NON-INDEX MAIN AUTHOR

## 2. MOLECULAR LINKS BETWEEN PERIODONTAL DISEASE AND ALZHEIMER'S DISEASE: A SYSTEMATIC REVIEW

INTERNATIONAL CONFERENCE ON MOLECULAR BIOLOGY AND BIOTECHNOLOGY

2025 PROCEEDING SCOPUS MAIN AUTHOR

## 3. 5 KARYA UNTUK BUKU JIWA SEJUTA SAYANG

2025 BOOK

## 4. PROBIOSHIELD: A NATURAL MOUTHWASH

INTERNATIONAL JOURNAL OF INNOVATION

2024 JOURNAL OTHER DATABASE MAIN AUTHOR

## 5. PROBIOSHIELD ORAL RINSE

INTERNATIONAL SCIENCE AND SOCIAL SCIENCE INNOVATION COMPETITION

2024 PROCEEDING NON-INDEX MAIN AUTHOR

## 6. CHARACTERIZATION AND POTENTIAL ORAL PROBIOTIC PROPERTIES OF LACTOBACILLUS PLANTARUM FT 12 AND LACTOBACILLUS BREVIS FT 6 ISOLATED FROM MALAYSIAN FERMENTED FOOD

ARCHIVES OF ORAL BIOLOGY

2022 JOURNAL ISI CORRESPONDING AUTHOR

## 7. TRANSCRIPTOMIC PROFILE ANALYSIS OF STREPTOCOCCUS MUTANS RESPONSE TO ACMEILLA PANICULATA FLOWER EXTRACTS

EVIDENCE-BASED COMPLEMENTARY AND ALTERNATIVE MEDICINE

2022 JOURNAL ISI, SCOPUS, EBSCO CO-AUTHOR

## 8. PROBIOTICS ALTER BIOFILM FORMATION OF PERIODONTAL PATHOGEN, PORPHYROMONAS GINGIVALIS VIRULENCE-ASSOCIATED GENES

6TH INTERNATIONAL CONFERENCE ON MOLECULAR DIAGNOSTICS & BIOMARKER DISCOVERY

2022 PROCEEDING SCOPUS CORRESPONDING AUTHOR

## 9. THERAPEUTIC POTENTIAL OF NIGELLA SATIVA

BIOCHEMISTRY, NUTRITION, AND THERAPEUTICS OF BLACK CUMIN SEED

2022 CHAPTER IN BOOK MAIN AUTHOR

## 10. IN VITRO ANTAGONISTIC EFFECT OF LACTOBACILLUS PLANTARUM FT 5 AGAINST PERIODONTAL PATHOGENS

INTERNATIONAL CONFERENCE ON DRUG DISCOVERY AND TRANSLATIONAL MEDICINE 2021

2021 PROCEEDING NON-INDEX CORRESPONDING AUTHOR

## 11. ISOLATION AND ANTIMICROBIAL ACTIVITY OF LACTIC ACID BACTERIA AGAINST STREPTOCOCCUS MUTANS

JOURNAL OF INTERNATIONAL DENTAL AND MEDICAL RESEARCH

2020 JOURNAL SCOPUS MAIN AUTHOR

## 12. ANTIMICROBIAL ACTIVITY OF PROBIOTIC AGAINST PORPHYROMONAS GINGIVALIS, A PERIODONTAL PATHOGEN

3RD INTERNATIONAL CONFERENCE ON ORAL MICROBIOLOGY & ORAL IMMUNOLOGY

2020 PROCEEDING NON-INDEX CORRESPONDING AUTHOR

## 13. A SIMPLIFIED SYSTEM FOR SIMULATION OF STREPTOCOCCUS MUTANS BIOFILM ON HEALTHY EXTRACTED HUMAN TOOTH AS DENTAL PLAQUE MODEL.

JOURNAL OF APPLIED PHARMACEUTICAL SCIENCE

2019 JOURNAL SCOPUS CO-AUTHOR

# PUBLICATION

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## 14. INTERNALISING THE PRINCIPLE OF FAITH IN TEACHING-LEARNING

INTERNATIONAL JOURNAL OF EDUCATION, PSYCHOLOGY AND COUNSELING

2019 JOURNAL MYCITE CO-AUTHOR

## 15. USRAH-PBL: ENHANCING UKHWAH AND FIKRAH IN DENTISTRY

INTERNATIONAL SCIENCE AND SOCIAL SCIENCE INNOVATION COMPETITION (I-SIC 2019)

2019 PROCEEDING NON-INDEX CO-AUTHOR

## 16. INTEGRATING USRAH AND PROBLEM-BASED LEARNING AS AN EDUCATIONAL APPROACH IN THE COURSE OF BEHAVIOURAL SCIENCE FOR DENTAL PRACTISE

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE

2019 PROCEEDING NON-INDEX CO-AUTHOR

## 17. ISOLATION AND ANTIMICROBIAL ACTIVITY OF PROBIOTIC STRAINS FOR CARIES PREVENTION

FRONTIERS PHARMACOLOGY

2018 JOURNAL WOS MAIN AUTHOR

## 18. ISOLATION AND ANTIMICROBIAL ACTIVITY OF PROBIOTIC STRAINS FOR CARIES PREVENTION

INTERNATIONAL CONFERENCE ON DRUG DISCOVERY AND TRANSLATIONAL MEDICINE 2018 (ICDDTM '18) ?SEIZING OPPORTUNITIES AND ADDRESSING CHALLENGES OF PRECISION MEDICINE?

2018 PROCEEDING NON-INDEX MAIN AUTHOR

## 19. EFFECT OF PROBIOTICS ON ORAL HEALTH IN CHILDREN: A SYSTEMATIC REVIEW.

INTERNATIONAL CONFERENCE ON NATURAL SCIENCE AND HERITAGE FROM ISLAMIC PERSPECTIVE (INSPIRE) 2018

2018 PROCEEDING NON-INDEX MAIN AUTHOR

## 20. INTERNALISING THE PRINCIPLE OF FAITH IN TEACHING-LEARNING

SEMINAR SERANTAU PENDIDIKAN TINGGI ISLAM KE 5

2018 PROCEEDING NON-INDEX CO-AUTHOR

## 21. MITOGEN-ACTIVATED PROTEIN KINASE PHOSPHATASE-2 DELETION IMPAIRS SYNAPTIC PLASTICITY AND HIPPOCAMPAL-DEPENDENT MEMORY

JOURNAL OF NEUROSCIENCE

2015 JOURNAL WOS MAIN AUTHOR

## 22. ASTROCYTE GROWTH AND NEURITE LENGTH ARE REDUCED BUT INTRACELLULAR CALCIUM IS INCREASED IN MAP KINASE PHOSPHATASE 2 (MKP-2) KO MICE,

SIPBS ANNUAL RESEARCH SYMPOSIUM, UNIVERSITY OF STRATHCLYDE.

2014 PROCEEDING NON-INDEX MAIN AUTHOR

## 23. MKP-2 DELETION RESULTS IN REDUCED ASTROCYTE PROLIFERATION AND NEURITE GROWTH BUT INCREASED SYNAPTIC ACTIVITY IN MOUSE HIPPOCAMPAL PRIMARY CULTURES.

11TH SCOTTISH NEUROSCIENCE MEETING

2014 PROCEEDING NON-INDEX MAIN AUTHOR

## 24. ASTROCYTE GROWTH AND NEURITE LENGTH ARE REDUCED BUT INTRACELLULAR CALCIUM IS INCREASED IN MAP KINASE PHOSPHATASE 2 (MKP-2) KO MICE

GLASGOW NEUROSCIENCE DAY 2014

2014 PROCEEDING NON-INDEX MAIN AUTHOR

## 25. MAP KINASE PHOSPHATASE 2 (MKP-2) DELETION REDUCES ASTROCYTE NUMBER AND NEURITE LENGTH BUT INCREASES BASAL SYNAPTIC TRANSMISSION.

FESTIVAL OF NEUROSCIENCE, LONDON.

2013 PROCEEDING NON-INDEX MAIN AUTHOR

**26. ASTROCYTE PROLIFERATION AND NEURITE GROWTH ARE REDUCED IN MAP KINASE PHOSPHATASE 2 (MKP-2) KO MICE**

10TH SCOTTISH NEUROSCIENCE MEETING

2013

PROCEEDING

NON-INDEX

MAIN AUTHOR

# PUBLICATION

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## 27. DETERMINING THE ROLE OF MKP-2 IN THE CNS

GLASGOW NEUROSCIENCE DAY

2013 PROCEEDING NON-INDEX MAIN AUTHOR

## 28. PROBIOTIC POTENTIAL OF LACTIC ACID BACTERIA FROM FERMENTED MALAYSIAN FOOD OR MILK PRODUCTS.

INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY

2012 JOURNAL OTHER DATABASE CO-AUTHOR

## 29. DETERMINING THE CONSEQUENCE OF MAP KINASE PHOSPHATASE 2 (MKP-2) DELETION ON CNS FUNCTION. 9TH SCOTTISH NEUROSCIENCE MEETING, DUNDEE.

9TH SCOTTISH NEUROSCIENCE MEETING, DUNDEE.

2012 PROCEEDING NON-INDEX MAIN AUTHOR

## 30. CYTOPROTECTIVE EFFECT OF LACTIC ACID BACTERIA.

8TH MPS PHARMACY SCIENTIFIC CONFERENCE 2008.

2008 PROCEEDING NON-INDEX MAIN AUTHOR

## 31. CYTOTOXICITY AND CHOLESTEROL REDUCING ABILITY OF LACTIC ACID BACTERIA (LAB)

SYMPOSIUM ON DIET, NUTRITION AND IMMUNITY

2008 PROCEEDING NON-INDEX CO-AUTHOR

## 32. CYTOTOXIC SELECTIVITY AND ANTIMICROBIAL ACTIVITY OF LACTIC ACID BACTERIA (LAB).

SYMPOSIUM ON DIET, NUTRITION AND IMMUNITY

2008 PROCEEDING NON-INDEX CO-AUTHOR

## 33. ORGANIC ACID PROFILE OF LACTIC ACID BACTERIA ISOLATED FROM FERMENTED FOOD

2ND INTERNATIONAL CONFERENCE ON EAST-WEST PERSPECTIVE ON FUNCTIONAL FOODS: SCIENCE, INNOVATIONS AND CLAIMS

2007 PROCEEDING NON-INDEX MAIN AUTHOR

## 34. EFFECT OF LACTIC ACID BACTERIA ON CANCER AND NORMAL CELL PROLIFERATION

2ND INTERNATIONAL CONFERENCE ON EAST-WEST PERSPECTIVE ON FUNCTIONAL FOODS: SCIENCE, INNOVATIONS AND CLAIMS

2007 PROCEEDING NON-INDEX MAIN AUTHOR

## 35. ISOLATION OF LACTIC ACID BACTERIA AS PROBIOTICS TO IMPROVE HUMAN HEALTH

3RD LIFE SCIENCE PENANG POSTGRADUATE CONFERENCE

2006 PROCEEDING NON-INDEX MAIN AUTHOR

## 36. ACID AND BILE TOLERANCE OF LACTIC ACID BACTERIA AS PROBIOTICS FOR HUMANS

6TH MPS PHARMACY SCIENTIFIC CONFERENCE

2006 PROCEEDING NON-INDEX MAIN AUTHOR

# AWARDS/RECOGNITION

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## 1. ANUGERAH PENULIS PROFILIK

2025 INTERNATIONAL

## 2. BOOK MANUSCRIPT REVIEWER

USIM

2025 UNIVERSITY

## 3. JOURNAL PEER REVIEWER (PEWASIT ARTIKEL JURNAL)

MALAYSIAN JOURNAL OF MEDICINE AND HEALTH SCIENCES

2025 NATIONAL

## 4. OROGENYX: RESTORING ORAL HEALTH

INNOVATION BANK CHALLENGE 2025

2025 ANTARABANGSA SILVER

## 5. ACADEMIC ADVISOR

USIM

2024 UNIVERSITY

## 6. ACADEMIC ADVISOR

USIM

2024 NATIONAL

## 7. ACADEMIC ADVISOR

USIM

2024 NATIONAL

## 8. ACADEMIC ADVISOR

USIM

2024 UNIVERSITY

## 9. PROBIOSHIELD: A NATURAL MOUTHWASH

INTERNATIONAL SCIENCE AND SOCIAL SCIENCE INNOVATION COMPETITION (ISIC VI 2024)

2024 ANTARABANGSA SILVER

## 10. ACADEMIC ADVISOR

USIM

2023 UNIVERSITY

## 11. ACADEMIC ADVISOR

USIM

2023 UNIVERSITY

## 12. ACADEMIC ADVISOR

USIM

2023 UNIVERSITY

## 13. USRAH-PBL: ENHANCING UKHWAH AND FIKRAH IN DENTISTRY

INTERNATIONAL SCIENCE AND SOCIAL SCIENCE INNOVATION COMPETITION i-SIC 2019

2019 ANTARABANGSA SILVER

**14. USRAH-PBL AS A TEACHING - LEARNING METHOD**

HARI KUALITI & INOVASI

2019

UNIVERSITI

CERTIFICATE OF APPRECIATION

# AWARDS/RECOGNITION

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## 15. HERBAL AND LOCAL TRADITION WITHIN SCIENCE AND ISLAMIC KNOWLEDGE

INTERNATIONAL CONFERENCE ON NATURAL SCIENCE AND HERITAGE FROM ISLAMIC PERSPECTIVE (INSPIRE) 2018

2018 ANTARABANGSA

## 16. PLANTORA: A DESIGNER PROBIOTIC FOR ANTICANCER DIETARY MEASURES

INVENTIONS, INNOVATION & DESIGNS 2008

2008 KEBANGSAAN SILVER

## 17. LACTOGUT ( A PROBIOTIC CULTURE PRODUCT )

35th INTERNATIONAL EXHIBITION OF INVENTIONS, NEW TECHNIQUES AND PRODUCTS, GENEVA, SWITZERLAND 2007

2007 ANTARABANGSA GOLD

## 18. GASTROLAC : A PROBIOTIC FOR THE DAIRY INDUSTRY

INVENTIONS, INNOVATIONS AND DESIGNS (IID) 2007

2007 KEBANGSAAN GOLD