

The IIUM Research and Innovation Day (IRID) 2024 is a prominent exhibition dedicated to health and sciences research, organized to showcase innovative research findings and foster research collaboration among scholars from the International Islamic University Malaysia (IIUM) and across Malaysia. This year's theme, **“LEADING THE RESEARCH, PUBLICATION AND INNOVATION CULTURE: SOARING HIGH IN RESEARCH EXCELLENCE,”** emphasizes the significance of publishing research outcomes to spread knowledge for humanity's benefit. The event is a joint effort with the Technology Transfer Office of the Research Management Centre, highlighting the potential for research projects to be selected for commercialization.

It offers a platform for interactive poster presentations, discussions, and the exhibition of creative innovations. The program aims to provide constructive feedback, facilitate the sharing of ideas, and encourage networking among researchers. **All submitted abstracts will be published in selected IIUM journals (MYCITE – indexed)** with awards for the best research and innovation in both student and staff categories. Participants are also encouraged to publish full articles in various IIUM journals. This initiative seeks to benefit attendees greatly, promoting experience sharing and the development of lasting relationships within the research community.

The objectives of the IRID 2024 are as follows:

- To identify the prominent researchers in Malaysia mainly IIUM Kuantan.
- To inculcate research culture among academic staff and students (postgraduate and undergraduate).
- To showcase the research findings and products of academic staff and students.
- To encourage inter Kulliyah/ Universities/ Institutions collaboration in research and innovation.
- To identify the best research outputs and products to represent IIUM at national and international competition.

The topics are

1. Basic Health Sciences
2. Applied Health Sciences
3. Medical & Health Sciences
4. Nursing & Midwifery
5. Pharmacy
6. Dentistry
7. Engineering
8. Biological Sciences
9. Art & Social Sciences



Bismillahirrahmanirrahim.

Assalamualaikum warahmatullah wabarakatuh.

Alhamdulillah, it gives me great pleasure to welcome you to IIUM Research and Innovation Day IRID 2024: An Exhibition for Health and Sciences Research. This programme aims to showcase innovative research findings and encourage research collaboration among researchers from IIUM and also around Malaysia.

The theme for this year's event is LEADING THE RESEARCH, PUBLICATION AND INNOVATION CULTURE: SOARING HIGH IN RESEARCH EXCELLENCE.

We want to highlight again the importance of publishing research results as a way to disseminate knowledge for the benefit of mankind.

This year's program is a collaboration with the Technology Transfer Office of the Research Management Centre. Your research has the potential to be selected as a potential research product for commercialisation.

The poster presentation will allow interaction and discussion among researchers. We also invite researchers who have creative innovations to showcase their products at this event.

I hope this event will serve as a good platform for you to receive constructive feedback, share ideas and spark friendships with other researchers.

All submitted abstracts will be published in selected IIUM journals (MYCITE – indexed), and awards will be given for best research and innovation among the students and staff categories. Participants are also invited to publish their research as full articles in IIUM journals.

I hope everyone benefits greatly from this event; I am looking forward to knowing you, sharing our experiences and building a lasting relationship together.

Thank you.



IIUM Research and Innovation Day (IRID) 2024
2nd July 2024 (Tuesday)
Grand Hall, Office of the Campus Director
International Islamic University Malaysia (Kuantan Campus)

Program Schedule

| Time | Event |
|----------|--|
| 8.30 am | Registration of participants |
| 8.45 am | Arrival of VIP and Guests |
| 9.00 am | Negaraku, Pahang Song, IIUM Song |
| 9.05 am | Recitation of Dua |
| 9.10 am | Opening remarks Prof. Dr. Nazri Mohd. Yusof Chairman IIUM Research and Innovation Day 2024 |
| 9.15 am | Officiating Speech & Officiating Ceremony Gimmick YB Dato' Mohamad Nizar Bin Dato' Sri Mohamad Najib, DSAP Pahang State Executive Councillor (EXCO) Investment, Industrial Development, Science, Technology and Innovation |
| 9.25 am | Token of appreciation for external guest |
| 9.35 am | Video Presentation Group photo |
| 9.40am | VIP visit the poster exhibitions and showcase |
| 10.00 am | Refreshments for VIPs and Invited guests |
| 10.30 am | Commercialization Talk 1 Prof. Dr. Mohd Shahir Shamsir Omar (Universiti Teknologi Malaysia, UTM) Title: "From Discovery to Disruption: Transforming Research into Start-up Success" |
| 11.15 am | Poster evaluations |
| 1.15 pm | Lunch break |
| 2.00 pm | Poster evaluations continues |
| 3.00 pm | Commercialization Talk 2 Madam Mariatini Othman (Senior Vice President, Technology Advisory Services, MTDC) Title: "Unlocking Opportunities: The Dynamics of Commercialization Ecosystems" |
| 3.00 pm | Scientific Research Meeting |
| 4.00 pm | Announcement of Winners for best participants |
| 4.15 pm | Prize giving ceremony and closing remarks Prof. Dr. Nazri Mohd. Yusof Chairman IIUM Research and Innovation Day 2024 |
| 5.00 pm | End of program and adjourn |

Concurrent Events (10.00 am – 4.00 pm) @ Grand Hall, IIUM Kuantan

One Stop Research Clinics by IIUM Gombak

1. Grant Initiative Unit (GIU)
2. Grant Management Unit (GMU)
3. Research Excellent Unit (REU)
4. Technology Transfer Office (TTO)
5. Copyright and MyRA Publication (Dar Al-Hikmah Library)

As of 24/6/2024

Porphyromonas Gingivalis In Oral Geriatrics And Its Association with Periodontal Health and Comorbidities

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PURPOSE: This study evaluated the periodontal status in geriatric subjects and found a significant association between *P. gingivalis* infection and clinical periodontal parameters as well as medical illness.

METHODS: Dental pockets' samples were obtained from 32 geriatrics who were chosen randomly from health clinics. Clinical periodontal parameters and medical illnesses were recorded during the oral examination. Samples were subjected to DNA extraction and polymerase chain reaction (PCR) amplification. The identification of *P. gingivalis* by PCR assay was determined based on the *P. gingivalis* 16S rRNA subunit amplification.

RESULTS: Approximately 90.63% of geriatric patients had periodontitis. The presence of *P. gingivalis* was significantly associated with periodontal depth and clinical attachment loss ($P = 0.037$). The extension of periodontal disease, smoking status, diabetes status and mild cognitive impairment are highly associated with *P. gingivalis*.

CONCLUSION: Due to asymptomatic periodontal disease in the early phase, early screening of bacterial detection and oral public health awareness is crucial, especially among elderly groups who are smokers and diabetics. Adequate oral care and comorbidities control among geriatrics are indeed crucial to prevent the periodontal disease progression.

Keywords: *Porphyromonas gingivalis*, periodontitis, geriatrics, smoker, mild cognitive impairment.