TS DR. NUR ALIANA HIDAYAH



 Faculty of Dentistry, University of Teknologi MARA, 47000, Sg Buloh Campus, Jalan Hospital. Selangor, Malaysia. Doctor of Philosophy (PhD), University of Nottingham.
 : Master in Medical Science (MMedSc), Kulliyah of Medicine,IIUM. : Bachelor of Biomedical Science, University of Malaya.
Head, Microindustrial Hub (Tissue engineering) Universiti Teknologi MARA
Senior Lecturer Faculty of Dentistry UiTM Sungai Buloh Campus, Jalan Hospital 47000 Sungai Buloh, Selangor Darul Ehsan
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ACADEMIC LECTURE

- Major in Medical and Dental Pharmacology and drug delivery
- Medical Physiology
- Business Modal Canvas (BMC)
- Bone Scaffold and Tissue Engineering
- 3D BIOPRINTING in precision medicine

Malaysia: Teaching the undergraduate and postgraduate students for Medical and Dentistry in Universiti Teknologi MARA and Universiti of Kuala Lumpur (Malaysia)

International : Teaching Pharmacology , Research Design and Methodology for University of Puthisastra, Cambodia, Middle East University, Jordan, Smarkand University, Uzbekistan and College of Agriculture, Nanyang , China.

SEMINARS/CONFERENCES

- Procedure and preparation to patent insulin cream.
- Poster presentation 23-25th March 2009, University of Taibah, Madinah. Can Rheolgy predict stability of insulin cream?
- Oral Presentation. 12-15 Mei 2009. 23rd MSPP. Kuala Lumpur. Wound management with application of insulin cream.
- Oral presentation. 23-25 July 2009. 5th Indonesia, Malaysia, Brunei Conference. Novel insulin cream in managing wound healing (Speaker).
- Oral Presentation. 2017. Simvastatin microspheres in bone tissue engineering. IIDEX. University Technology MARA.
- Oral presentation at International Conference on Drug Discovery and Translational Medicine 2018 (ICDDTM '18)
- Oral presentation ISEX Penang 2018. Injectable scaffold in tissue engineering.
- Oral presenter IDEX. Simvastatin microspheres for nasopharangeal Carcinoma. 2019.
- Oral Presenter. International Dental technology. Fun with oral Science Kit. 2019.
- Oral Presenter. Injectable Simvastatin Microspheres for Bone Tissue Engineering. The Lancet Countdown on Climate Change and Health Report. 2019.
- Oral Presenter. RoseCinn. Be confidence with your smile (on the go denture cleanser). The Lancet Countdown on Climate Change and Health Report. 2019.
- Oral Presenter. *Ficus deltoidea* : Nature's healer of oral ulcer. The Lancet Countdown on Climate Change and Health Report. 2019.
- Simvastatin drug delivery for bone regeneration. 2022-AP TERMIS student paper.

- Porous injectable scaffold with improved mechanical integrity. 2022-AP TERMIS student paper.
- Oral Presenter. Understanding the effect of introducing biopolymer at two distinct phases during homogenization in a double solvent evaporation technique: A study using simvastatin as a model drug for bone tissue regeneration. International conference of drug discovery and translational medicine 2023. 5-6th September 2023.
- Oral presenter. International Conference and Winter School. 9th MTERMS
- Oral presenter.

PUBLICATIONS

- Can Rheolgy predict stability of insulin cream? Taibah International Chemistry Conference (TICC2009), Madina, Saudi Arabia, 23-25 March 2009.
- Rheology studies determine the correlation of physical stability of insulin cream by LAP Lambert Academic Publishing, Germany.
- Insulin cream in managing wound healing.
- Prevalence of periodontitis in Dental Students in University Technology MARA Fouad Al-Bayaty, Saba F. Hussain, Azwin Assilah Kamaruddin, Aiman Nadiah A. Tajuddin, Farah Hidayah Mohd Fazli, Maziahtul Z. Munshi, Siti Sarah Norrizan, Nur Aliana H. M. Journal of Advanced Medical Research 1 (2011) 16-23.
- Manual and electronic Detection of Sublingual Calculus and Reliability. Mehedi Hassan Masud, Hamdan Zehdi Nur Aliana Hidayah Mohamed. <u>https://doi.org/10.7603/s40782-014-0008-7</u>
- Masud M., Al-Bayaty, Mohamed N.A.H., Alwi A.S., Takiyudin Z.,& Hidayat M.F.H. (2018). Gingival Recession and Dentine Hypersensitivity in Periodontal Patients: is It Affecting Their Oral Health Related Quality of Life? Journal of International Dental and Medical Research. 1(1). pp.909-914. <u>http://dl6.globalstf.org/index.php/jamr/article/view/1576</u>
- A review of microRNA associated with Oral Cancer (2019, Q3)
- Improved Skin Wound Healing Activity of Insulin Cream as Evidenced from the Morphological Evaluation in Guinea Pigs. Nur Aliana Mohamed, Rafidah H Mokhtar, Imad M Al-Ani, Azizi Ayob, Misni Misran. Makara J. Health Res., 2018, 22(2): 88-94 doi: 10.7454/msk.v22i2.9714
- Review of MicroRNA Associated with Oral Cancer. (2020, Q3)
- Amplification free and direct fluorometric determination of telemorase activity in cell lysate using chimeric DNA silver nanoclusters. (2019, Q1).
- The evaluation of bone regeneration following socket preservation with concentrated growth factor (CGF) and poly lactic-co-glycolic acid (PLGA) scaffold in rabbits. Archies of Orofacial Sciences (USM). Zety Noh, Nur Aliana Hidayah Mohamed, Erni Noor. (2021, Q2)
- Periodontal consequences following avulsion that you should know? BDJ Student (Springer Nature). Zety Noh, Nur Aliana Hidayah Mohamed, Erni Noor. (2022, Q3).

- Platelet concentrates effect on bone regeneration in dental surgery: a narrative review. Dentistry Review (Elsevier). Zety Noh, Nur Aliana Hidayah Mohamed, Erni Noor. (2022, Q3).
- Bone regeneration following rabbit socket preservation with concentrated growthfactor(CGF) and poly lactic-co-glycolic acid(PLGA) scaffold- (Q3,2021).
- The influence of poly lactic-co-glycolic acid scaffold with concentrated growth factor on human osteoblast cells (Q3,2021).
- A ratiometric fluorescent biosensor based on magnetic-assisted hybridization chain reaction and DNA-templated silver nanoclusters for sensitive microRNA detection (2022, Q1).
- Investigation of the Inhibitory Effects of Simvastatin in RPMI 2650 : An In-vitro Study (MyCITE 2022).
- Platelet concentrates effect on bone regeneration in dental surgery: A narrative review. (Q3, 2022).
- The Evaluation of Bone Regeneration Following Socket Preservation with Concentrated Growth Factor (CGF) and Poly Lactic-Co-Glycolic Acid (PLGA) Scaffold in Rabbits (Q3, 2022).
- The remineralisation effect of vitamin D on the artificially demineralised enamel: An in vitro preliminary study. Malaysian Journal of Paediatric Dentistry (2023)
- Review of materials for the fabrication of microparticles in the context of bone tissue engineering. MyCite. (2023)

GRANTS

- Facile and PCR-Free Detection of miRNA Using Magnetic Separation and Fluorescent Silver Nanoclusters. FRGS/1/2018/STG07/UNIM/02 (Co-Researcher)
- Lestari grant. Insulin cream in managing wound healing. Internal Grant. 2013 (Principal).
- COVID 18 Lestari Grant: Development of Hydroxychloroquine Nanoparticles For Pulmonary Drug Delivery Targeting Severe Acute Respiratory Syndrome Coranavirus 2 Sars COV 2 In The Lung. I 600-RMC/LESTARI COVID/5/3 (018/2020).
- Industrial grant (SS TURBO Sdn Bhd): Scaffold in Tissue Engineering -2023 -RM 20K (Principal)
- UiTM Prototype Award: 600-UiTMSEL (PI. 5/4) (158/2022) 2022. (Principal)
- Industrial Grant (RM 304,000) Malgaz Sdn Bhd. (Principal)
- IMAP 1.0 2024 (RM298,000), Ministry of Higher Learning (Principal)

COPYRIGHTS/PATENTS

- MicroX: Bone tissue grafting material. My IPO registered (2019).Pending for Patents
- Fun in oral sciences kit-MYIPO registered (2019)
- Aeropod (2022)- PENDING FOR PATENTS
- Titanium Bone Graft (2023)- Copyrights

AWARDS: LOCAL/INTERNATIONAL

- Gold Award: Invention, innovation and design Expo. 15-17 March 2013.UiTM
- Silver Award:13th International Conference And Exposition On Inventions By Institutions Of Higher Learning KLCC. April 2013
- Silver Award: 24TH International Invention & Innovation Exhibition (ITEX 2015) KLCC. June 2013
- International Merit Scholarship for Doctor of Philosophy (PhD). ISLAMIC DEVELOPMENT BANK (IDB) Saudi Arabia.2014
- Phd Scholarship Award. Nottingham University. United Kingdom. 2014
- Excellence Service Award. (APC) UITM 2014
- Gold Award: Injectable Simvastatin microparticles in tissue engineering. (2018)
- Gold Award : Simvastatin microspheres for nasopharyngeal carcinoma. (2019)
- Gold Award: Fun with Oral Science Kit (2019)
- Diamond Award: Fun with Oral Science Kit (2019)
- Faculty Best Academic Staff- 2019
- UITM Excellence Service Award (APC) UITM 2019
- Gold Award (ITEX) Aeropod 2022
- Gold Award (MTE) Device control for airborne disease 2022
- Gold Award (IIDEX2023) Titanium Bone Grafting for Mechanical Improvement - 2023

COMMUNITY SERVICE

- Mobile Dental Bus (MDC). The Lancet Countdown on Climate Change and Health Report. Dewan Berlian UiTM Puncak Alam, 42300 Kuala Selangor, Selangor. 2019.
- Lets sign your language HEAD:). Tadika/Taska Istika Jaya OKU Pendengaran, Puchong. 2019
- Special Smile Healthy Life Ketua Program : Rumah Harapan Nur Afiyah, Bukit Rahman Putra, Sg Buloh. 2019

- Kampung Orang Asli Grik. Molecular pathways of oral cancer that predict prognosis and survival. 2020
- Penceramah. Menjawab Soalan Professional Examination (2019).
- B40 Women Entrepreneur Cohort 1 :Sabah Principal (2022-2024)
- STEM for school- Cohort 1– Principal (2024)

ACADEMIC APPOINTMENTS

- Head, Postgraduate Department, Faculty of Dentistry Universiti Teknologi MARA (2019-2023)
- Coordinator for Pharmacology, Faculty of Dentistry Universiti Teknologi MARA (2018-2024)
- Ethics Committee, Faculty of Dentistry Universiti Teknologi MARA (2019-2023)
- Bursary Committee, Faculty of Dentistry Universiti Teknologi MARA (2019-2023)
- IPSIs Panel advisory for Research Studies, Universiti Teknologi MARA (2019-2023)
- Adjunct Associate Professor , Faculty of Dentistry , University Puthisastra, Cambodia
- Adjunct Associate Professor , Department of Veterinary Nanyang Vocational School, China
- Invited lecturer, Faculty of Medicine,Smarkand State Medical University, Uzbekistan.
- Invited lecturer, Faculty of Pharmacy , University Puthisastra, Cambodia

ACADEMIC EXAMINERS

- Defence Research Proposal Panel- Post-graduate (2019)
- Elective Research Panel Undergraduate (2019)
- VIVA VOCE PANEL 2019 FOR PROFESSIONAL EXAMINATION-DS 701 Master in Science Dentistry (DS 701)
- VIVA VOCE PANEL 2019 FOR PROFESSIONAL EXAMINATION-DS 401
- Chairperson in Viva and Defence Research Proposal , Faculty of Dentistry Universiti Teknologi MARA.
- Chairperson: TERMIS CONFERENCE- Tissue Engineering Conference 2022.
- Lincoln Examiners for Professional Examination, Faculty of Dentistry (2023).

RESEARCH SUPERVISION – UNDERGRADUATE

- Supervisor- Van Meying, Ty Roniza, Sovanara Rachna . A cross-sectional study evaluating the knowledge, perception, attitude of dental student on antibiotic usage in University of Puthisastra (2022-2025)
- Supervisor : Ahmad Izzat (ERP 2020)
- Supervisor : Nur Sabrina Asnawi. The Effect of Simvastatin microparticles on Nasopharangeal Carcinoma (ERP 2019)
- Supervisor : The Effect of Simvastatin microparticles on Nasopharangeal Carcinoma Nur Fadzliana Mohd (ERP 2019)
- Supervisor : The Effect of Simvastatin on Nasopharangeal Carcinoma Zuhayra Nasrin Zuhairi (ERP 2018)
- Supervisor : The Effect of Simvastatin on Nasopharangeal Carcinoma Nur Amirah Sanigapor (ERP 2018)

MAIN SUPERVISION – MASTER AND PHD

- **Supervisor** : Khairani Hasuna Jaapar (Master study DS 750 converted to PhD). Potential of Porous Simvastatin-loaded PLGA Scaffold impregnated TiO2 nanotubes for Bone Tissue Engineering (2022) – ongoing
- Supervisor : Ahmad Fareez Mohamed (DS 750). Evaluation of Different Coating in Porous Simvastatin-loaded PLGA Scaffold for Bone Tissue Engineering. (2023)
- Supervisor : Syamimi Ahmad Zaini. Fabrication of Development of Hydroxychloroquine Nanoparticles for Pulmonary Drug Delivery Targeting Severe Acute Respiratory Syndrome Coronavirus 2 (Sars-Cov-2) in the Lung. (2021)ongoing

CO-SUPERVISION – MASTER AND PHD

- Vivi Noryati Ahmad (DS950) PhD Ongoing
- Lee Shi Ting (PhD, University of Nottingham) (2018)- Completed
- Dr Zety Noh. Fabrication of Poly Lactic-Co-Glycolic Acid (PLGA) scaffold with concentrated growth factor for rabbit socket prevention. Potential for Regenerative medicine, (DS 931, UiTM) (2018) – Completed
- Dr Mohd Zulkifli. The effect of vitamin D₃ on enamel demineralisation and remineralisation: *an in-vitro* study. (DS975, PhD, 2023) Completed
- Farah Hazwani. Molecular mechanism of allicin induced apoptosis in human oral squamous cell, carcinoma (OSCC), ORL-48 (DS750, MsC,2023) Completed
- Mojataba Shafiei. Synthesis and Characterization of Nano-liposomes filled with stingless bees propolis gelatin based hydrogel for diabetic foot ulcer. (PhD). Universiti Teknologi Malaysia (2023-2025)

 Nur Eszaty Farain Esa. Preparation and synthesis and Characterization of Kelulut Honey/GelmaHtdrogel for diabetes. (PhD). Universiti Teknologi Malaysia (2023-2025)

JUDGES

- International Innovation, Invention and Exhibition BIIDEX (2019)
- Melaka International Intellectual Exposition (2019)
- Poster Presentation : 9th Dental Student's Scientific Symposium. Faculty of Dentistry UiTM. 2019
- 3MT Judge : Postgraduate. Faculty of Dentistry, UiTM (2020)
- Virtual Innovation, Invention and Design. PHARM-IDEX (2021)
- Econdev UiTM (2021)
- Oral Judge. International 11th Dental Student's Scientific Symposium (2021)
- Science Exploration- It's a lab time . UiTM Cawangan Perak (2021)
- IICE 2022- Faculty of Health Sciences, UITM (2022)
- Econdev UiTM (2021)
- IDENEX UITM (2024)

EDITORIAL AND REVIEWER

- THE 3rd INTERNATIONAL CONFERENCE ON THE FUTURE OF ASEAN (ICoFA) 2019
- Smartphone Addiction Vs Academic Performance: An Empirical Study
- The Effectiveness of Board Game In Teaching And Learning Mandarin
- Compendium of Oral Sciences Editorial board members.
- (Post-Graduate Training In Innovation & Entrepreneurship Exploration) TIE Panel MASMED, Universiti Teknologi MARA- from 2021 until now.
- IOP international publisher Reviewer (2023 until now)

MEMBERSHIP: MALAYSIA

- Member- Natural Approach to Oral health
- Malaysia Board of Technology (MBOT)
- Member- Malaysian Physiology and Pharmacology Society
- Member- MITASA UITM
- Member-Kelab Kebajikan Fakulti Pergigian UiTM
- Secretary- Malaysia Science Association (PERSASMA)

MEMBERSHIP: INTERNATIONAL

- Member- SOCIETY OF BIOMATERIAL
- Member- EUROPEAN CANCER ASSOCIATION
- Member Tissue Engineering Society
- Member- British Society of Pharmacology

ACADEMIC AND INDUSTRIAL COLLABORATIONS

- Associate Lim Siew Shee- Faculty of Engineering University of Nottingham Malaysia (from 2019)
- Dr Jamuna Thevi a/p Kalitheertha Thevar SIRIM AMREC. KULIM (MOU 2018)
- Professor Dr Callum Dunward. University of Puthisastra, Cambodia. (MOU 2020)
- UniKL internship programme . Department of Biomedical science.
- Research Fellow EMAN NUTRACEUTICAL, Sg Petani, Kedah.(2023)
- Malgaz sdn Bhd Consultant (2023)
- Research Fellow Lincoln University (2023)
- Professor Dr Satoshi . Research Collaborators. Toyama Prefectural University, Japan (2024)
- Associate Professor Dr Fauzi Busra. Departemnt of Tissue Engineering, Faculty of Medicine, Universiti Kebangsaan Malaysia. (2024)

SPEAKERS

- Young scientists International Exchanging Sessions , Department of Biomaterials Institute for life , Kyoto University (2024)
- Mastering the winning of innovation Awards. Biomic Eduhub (2024)
- Unveiling the path to gold innovation Awards. Biomic Eduhub (2024)
- Pameran Stem Dan Inovasi Sempena Karnival Stem Dan Keusahawanan Sekolah Menengah Kebangsaan Seksyen 18 Shah Alam (2023)

VISITING LECTURER AND OUTBOUND SCHOLAR

- Fellow, Institute of Biomedical Science, United Kingdom (2020-2024)
- Adjunct Assistant Professor, Faculty of Pharmacy, University Puthisastra, Cambodia (2023)
- Adjunct Assistant Professor, Faculty of Dentistry, University Puthisastra, Cambodia (2020-2024)
- Adjunct Professor, University of Smarkand, Uzbekistan 2023
- Visiting Lecturer, Nanyang University, China (2023 & 2024)

REFERENCES

Professor Dato Dr. Mohamed Ibrahim

Dean,

Faculty of Dentistry,

MAHSA UNIVERSITY

Selangor Darul Ehsan

Professor Dr. Khalifah Sidik,

Director, Master of Science in Medical Biotechnology Program,

Department of Biomedical Sciences,

College of Medicine Rockford,

Illinois, United States of America (USA).