



USM

UNIVERSITI SAINS MALAYSIA

2023 ANNUAL REPORT

SCHOOL OF DENTAL SCIENCES



PREPARED BY :
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dental.usm.my

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RESEARCH, INNOVATION &
INDUSTRY COMMUNITY ENGAGEMENT

Message From the Deputy Dean (Research, Innovation & Industry- Community Linkages)



Assalamualaikum wrt. wbt. and Greetings,

The Research, Innovation, and Industry-Community Engagement office/unit is responsible for promoting and supporting interdisciplinary research, enhancing the visibility of research clusters, cultivating a positive research environment, encouraging innovation, as well as promoting collaboration among researchers in the university and engagement with other institutes both locally and internationally.

Our aim is to promote impactful research to contribute to the development of a better, more sustainable future. In order to achieve this objective, the participation and cooperation of both academic and administrative staff are very important. I would like to express my thanks and appreciation to everyone for their continued cooperation and support.

Best Regards,

ASSOCIATE PROFESSOR DR. SUHARNI MOHAMAD

CARTA ORGANISASI

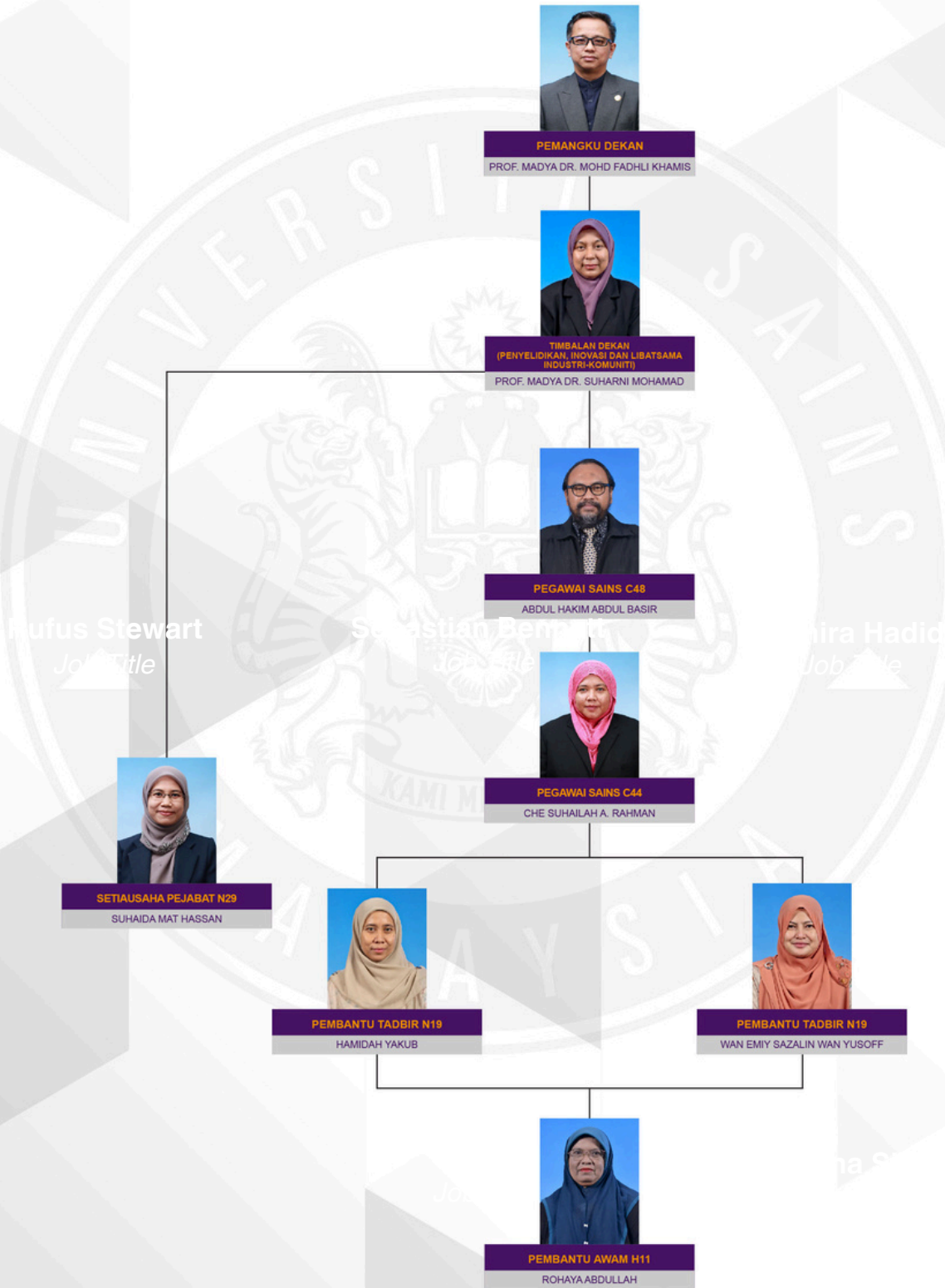
UNIT PENYELIDIKAN & INOVASI



USM UNIVERSITI SAINS MALAYSIA



PUSAT PENGAJIAN SAINS PERGIGIAN, KAMPUS KESIHATAN, USM





UNIVERSITI SAINS MALAYSIA

SCHOOL OF
DENTAL SCIENCES

HEALTH CAMPUS

VISION

The School of Dental Sciences, USM is to be the centre of excellence in academia, innovations, research and services, and be the catalyst and leader for new knowledge in teaching, learning, research and services for Malaysian higher education and the world.

MISSION

The School of Dental Sciences, USM is committed to the pursuit of excellence and innovations in academia, services, research, development of human resources, by fostering a conducive educational environment and promoting holistic development programmes to meet national needs through exploring new frontiers of technology, and remain globally competitive to fulfill our community responsibility.

www.dental.usm.my

Grants

New Grants Received in 2023



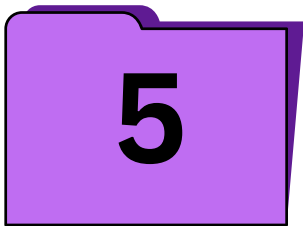
Short Term Grants



BJIM Grants



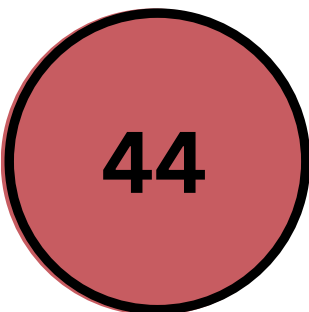
Industry Grants



FRGS

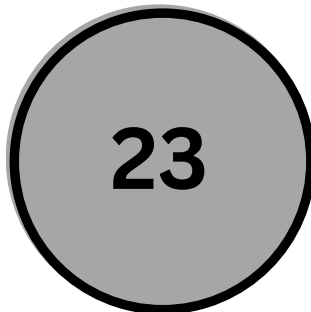
Active Grants in 2023

University



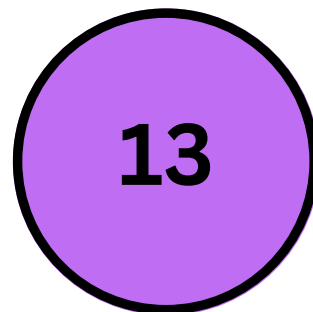
24 STG
14 RU
6 BJIM

National



22 FRGS
1 PRGS

External



10 NATIONAL
3 INTERNATIONAL

Grants



 UNIVERSITI SAINS MALAYSIA APEX™
 SCHOOL OF DENTAL SCIENCES

Congratulations
 to the recipients of
Fundamental Research Grant Scheme (FRGS) 2023
 School of Dental Sciences, USM

	<p>Dr. Hanim Afzan Ibrahim Elucidating the Modulation of Alpha-Klotho Protein in Fibroblast Growth Factor 23 Signalling Pathway in the Progression of Chronic Kidney Disease Patients with Periodontitis following Periodontal Therapy.</p> <p>RM177,200.00</p>
	<p>Dr. Nurhafizah Ghani Investigating the Mechanism of Neurogenic Differentiation of Stem Cells From Human Exfoliated Deciduous Teeth (SHED) in Response to Modulation of Serotonin Receptor 7 (5-HTR7).</p> <p>RM191,225.00</p>
	<p>Dr. Nur Karyatee Kassim Deciphering the Neuroinflammatory Interplay of Angiogenesis, Oxidative Stress, And Neuroplasticity Mechanism in Stroke Patients Following Robotic Exoskeleton-Assisted Rehabilitation.</p> <p>RM169,455.00</p>
	<p>Ts. Dr. Mohamad Arif Awang Nawi Elucidating an ARIMA-LSTM Hybrid Model with Exogenous Variables for Forecasting and Improving COVID-19 Decision Making.</p> <p>RM72,240.00</p>
	<p>Dr. Huwaina Abd Ghani Elucidating Mechanisms of Calcium Hydroxide Incorporated with Copper Oxide Nanoparticle against E. Faecalis as Root Canal Medicament.</p> <p>RM166,539.00</p>

from
 All Staff, School of Dental Sciences. USM

Grants



U.S.M. **APEX™**
UNIVERSITI SAINS MALAYSIA

Congratulations

Dr. Johari Abdullah
on being awarded
Industrial Grant:
TDC Holdings Sdn. Bhd.
Project title:
**Development of Energy Bar using
White Oyster Mushroom.**

RM219,000.00

Co-researchers:
Dr. Syahariza Zainul Abidin (PPTI, USM), Dr. Musfirah Zulkurnain (PPTI, USM),
Dr. Norsila Abdul Wahab (PPSG, USM), Dr. Nurulezah Hasbullah (PPSG, USM),
Dr. Yanti Johari (PPSG, USM) & Dr. Hamid Yusoff (UiTM, Pulau Pinang).



U.S.M. **APEX™**
UNIVERSITI SAINS MALAYSIA

Congratulations

Dr. Noraini Mohamad
on being awarded
External Research Grant
(BREGO Life Sciences Sdn. Bhd.)
Project title:
**The Effectiveness of Fixed Dose Combination of
Alpha Lipoic Acid and Vitamin B Preparations for
Treatment of Diabetic Polyneuropathy in Type 2 Diabetes
Mellitus Patients: A Randomized Placebo-controlled Trial**

RM90,000.00

Co-researchers:
Dr. Zainab Mat Yudin, Assoc. Prof. Ts. Dr. Wan Muhammad Amir Wan Ahmad

Grants






Congratulations

Dr. Noraini Mohamad
School of Dental Sciences, USM

on being awarded
**Family Medicine Specialist's Association
 (FMSA) Research Grant**

Project title:
**Oral Symptoms and Oral Health-Related Quality
 of Life (OHRQOL) among Patients with Diabetes Mellitus
 attending Hospital Universiti Sains Malaysia**

Co-researchers:
 Dr. Zainab Mat Yudin@Badri, Assoc. Prof. Dr. Wan Muhammad Amir Wan Ahmad, Goh Pin Hui

RM2,121.00






Congratulations

Dr. Nur Karyatee Kassim

on being awarded
**Industrial Grant:
 Roche Diagnostic (M) Sdn Bhd.**

Project title:
**Diagnostic Evaluation Of Elecsys GAAD Score
 Among Hepatocellular Carcinoma And Chronic Liver
 Disease In Hospital Universiti Sains Malaysia**

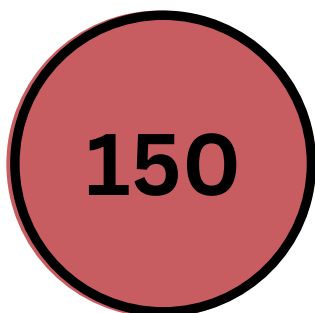
Co-researchers:
 Assoc. Prof. Dr. Wan Muhammad Amir Wan Ahmad (PPSG), Dr. Hanim Afzan Ibrahim (PPSG),
 Prof. Dr. Lee Yeong Yeh (PPSP), Dr. Aniza Mohammed Jelani (PPSP),
 Dr. Rabiatul Adawiyah Mohamad Noor (PPSP)

RM5,000.00

Publications

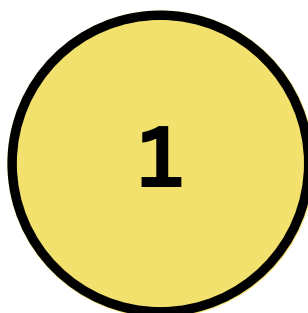
Number of Publications in 2023

Indexed Journals



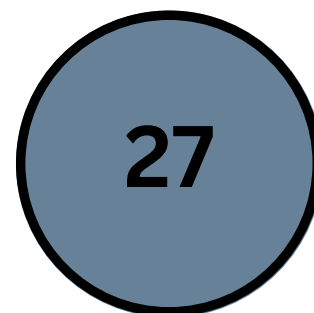
50 Q1-Q2
40 WoS (Q3-Q4, ESCI)
60 Scopus

Indexed Proceedings

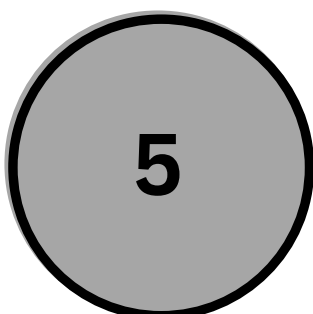


1 Scopus

MyCite

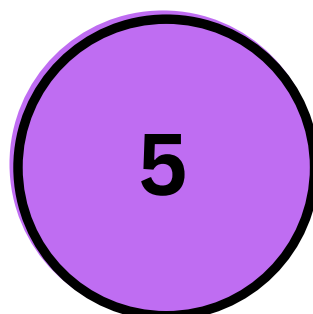


Research Books



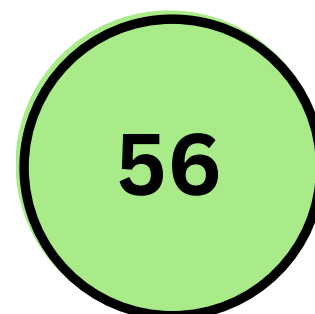
0 SCOPUS/WOS
5 Not Indexed

Chapter in Books



1 SCOPUS/WOS
4 Not Indexed

Other Publications



Awards






Sekalung Tahniak

Dr. Noraini Mohamad
Pusat Pengajian Sains Pergigian

di atas pencapaian
Penarafan 5 Bintang
Projek Libatsama Universiti Komuniti
 daripada
 Bahagian Jaringan Industri, Masyarakat & Kelestarian Institusi,
 Universiti Sains Malaysia (BJIM-USM) - Oktober 2023

Tajuk Projek:
 Webinar Kesedaran Faktor Risiko Penyakit Kardiovaskular serta
 Kesannya kepada Kesihatan Oral dalam Kalangan Guru di Kelantan







Congratulations

Dr. Mohd Faizal Abdullah
School of Dental Sciences, USM

for winning
Gold Award (Young Researcher Category)
 for innovation titled
**Bilateral Buccal Mucosa Graft For Urethroplasty:
 A Versatile Graft**
 at the:
National Oral Health Research Initiative Conference 2023

Co-researchers:
 Dr. Fattirah Auni Fauzi, Prof. Dr. Shaifulizan Abdul Rahman



Awards



Tahniah

Prof. Madya Ts. Dr. Wan Nazatul Shima Shahidan
Pusat Pengajian Sains Pergigian

di atas pencapaian
Penarafan 3 Bintang
Projek Libatsama Universiti Komuniti 2023
Bahagian Jaringan Industri, Masyarakat &
Kelestarian Institusi
(BJIM-USM), 30 Ogos 2023

Tajuk Projek:
**Program Kesedaran Penggunaan Antibiotik dengan Betul,
Perangi Ubat Tidak Berdaftar dan Kempen Satu Rumah Satu
COVID-19 'First-Aid'**

USM UNIVERSITI SAINS MALAYSIA APEX™



Congratulations

Dr. Nor Aidaniza Abdul Mutlib
School of Dental Sciences, USM

for winning
Best Overall Research (Oral), Colgate IADR Malsec Award
for presentation titled
**Physical Properties of Polyamide12 Composite Reinforced
with Agriculture Biowaste's Fillers as a Potential Dental Post**
at the:
**22nd Annual Scientific Meeting International
Association for Dental Research (IADR) Malaysian Section 2023**

Co-researchers:
Nurul Syafika Atikah Babu, Dr. Rabihah Alawi, Assoc. Prof. Dr. Mohd Hazwan Hussin,
Assoc. Prof. Dr. Mohamad Nasir Mohamad Ibrahim, Dr. Mohd Firdaus Yhaya

USM UNIVERSITI SAINS MALAYSIA APEX™

Seminars & Courses

CPD 1 HOUR TALK @ PPSG
FINANCIAL MANAGEMENT OF GRANTS
TUESDAY | **TIME**
31 JAN 2023 | **9 –10 AM**

SPEAKERS
SHAFINAZ MOHAMED SAAT
WAN MOHD HALIMSANI WAN PA
ELLY FATMAWATEE HUSSEIN
 JABATAN BENDAHARI, USM

Organised by: R&I Unit of PPSG

School of Dental Sciences Health Campus

WEBEX
INTELLECTUAL PROPERTY: WHAT YOU NEED TO KNOW ON PATENT, TRADEMARK, COPYRIGHT AND INDUSTRIAL DESIGN.

2nd February 2023 (Thursday) | **2.30 pm – 4.00 pm**

Moderator: **Dr Norhayati Yusop**
 Lecturer, School of Dental Sciences

Speaker: **Ms Hartini Alias**
 Research Officer, Centre for Innovation & Consultation

Meeting Information:
 Meeting link: <https://usm-cmr.webex.com/usm-cmr/j.php?MTID=m7e23d951d9e921336c4835c4c11d2148>
 Meeting Number: 2519 070 3463
 Password: PPSG123

Organized by: Research & Innovation Unit

EXPERIENCE SHARING IN INDUSTRIAL ENGAGEMENT

Mediator: **Dr. Tang Liszen**

1st FRIVODUCATION 2023 SESSION
Berhubung Sains! Academia

(POSTGRADUATE STUDENTS, ACADEMICIANS, RESEARCH AND SCIENCE OFFICERS)

Meeting link: <https://usm-cmr.webex.com/usm-cmr/j.php?MTID=m58119aefecbc44a8b397b0083ba6f612>
 Meeting Number: 2511 147 2485
 Password: Frivo1

ONLINE | **9th February 2023 (Thursday)**
 WEBEX | **2.30 PM – 3.30 PM**

CPD Point for USM Staff: Note: To claim your CPD Point, please email staff number and full name to wannemly@usm.my

Organized by: Research & Innovation Unit

BENKEL BERSEMUKA
PENGENALAN HRMIS 2.0

SPEAKER
ABDUL HAKIM ABDUL BASIR

FACILITATORS
NOR SHAMSURIA OMAR
CHE SUHAILAH A RAHMAN

TARIKH
 15 FEB 2023

MASA
 11 AM – 1 PM

Organized by: Research & Innovation Unit, School of Dental Sciences

PRE-FRGS CLINIC
TIPS AND TRICKS IN SECURING FRGS GRANT

SPEAKER
ASSOC. PROF. TS. DR. AZLINA AHMAD

FACILITATOR
ASSOC. PROF. TS. DR. DASMAWATI MOHAMAD

SESSION 1
 DATE: 12th Feb 2023
 TIME: 9:00 – 11:00 AM

SESSION 2
 DATE: 16th Feb 2023
 TIME: 2:00 – 4:00 PM

SCAN QR FOR WEBEX LINK

ORGANISED BY R&I UNIT

SCHOOL OF DENTAL SCIENCES HEALTH CAMPUS, USM

Webinar on Publication
Sharing from Top 2% Citation Impact Author

16th FEBRUARY 2023 (THURSDAY) | 10.00 AM – 11.00 AM

Meeting Information:
 Meeting link: <https://usm-cmr.webex.com/usm-cmr/j.php?MTID=mb8b0b0f69d75815a1975a570a371d>
 Meeting number: 2518 285 0537
 Password: wopub0216

Assoc. Prof. Dr. Muhammad Saiful Bahri Yusoff
 Department of Medical Education, School of Dental Sciences, Universiti Sains Malaysia

CPD Point for USM Staff: To claim, please email staff number and full name to wannemly@usm.my

Organized by: Research & Innovation Unit, School of Dental Sciences

SCHOOL OF DENTAL SCIENCES HEALTH CAMPUS, USM

Webex
DOUBLE TAX EXEMPTION FOR INDUSTRIAL GRANTS

9th March 2023 (Thursday) | 2.30 pm - 4.00 pm

Meeting Information:
 Meeting link: <https://usm-cmr.webex.com/usm-cmr/j.php?MTID=mm7a27953c779a087c9568262d3a453d>
 Meeting number: 2519 485 9950
 Password: 1234

Organized by: Research & Innovation Unit, School of Dental Sciences

SCHOOL OF DENTAL SCIENCES Health Campus

REACHING THE BJIM STARS SHARING EXPERIENCE

2nd FRIVODUCATION 2023 SESSION
Berhubung Sains! Academia

(POSTGRADUATE STUDENTS, ACADEMICIANS, RESEARCH AND SCIENCE OFFICERS)

Speakers:
 Assoc. Prof. Ts. Dr. Dasmawati Mohamad | Dr. Munirah Mohd Adnan | Dr. Sariza Yasmin Sanusi

Moderator: **Dr. Johari Yap Abdullah**

ONLINE | **13 April 2023 (Thursday)**
WEBEX | **2.30 PM – 3.30 PM**

Meeting link: <https://usm-cmr.webex.com/usm-cmr/j.php?MTID=mc1f5e48b722b742f148bd47fed6266a>
 Webinar number: 2515 226 5495
 Password: Frivoducation2

CPD Point for USM Staff: Note: To claim your CPD Point, please email staff number and full name to wannemly@usm.my

Organized by: Research & Innovation Unit, School of Dental Sciences


Seminars & Courses

USM APEX School of Dental Sciences Health Campus

WEBINAR ON PUBLICATION


Q1-Q2 WORKSHOP

THURSDAY **TIME**
11 MAY 2023 **9-11 AM**



PROFESSOR DR LIZA SHARMINI AHMAD TAJUDIN
DEPARTMENT OF OPHTHALMOLOGY, SCHOOL OF MEDICAL SCIENCES, UNIVERSITI SAINS MALAYSIA

Scan for Webex link



Organised by R&I Unit

USM APEX School of Dental Sciences Health Campus

TIPS AND TRICKS TO CONDUCT AND WRITING A SCOPING REVIEW

Organised by Oral and Maxillofacial Disease (OMD) Research Cluster, School of Dental Sciences

THURSDAY **TIME**
18 MAY 2023 **10.00AM - 11.00 AM**



SPEAKER
ASSOCIATE PROFESSOR DR. NURUL HUDA BASKY RAJASEKARAN
Research & Innovation Unit, School of Dental Sciences

Meeting link: <https://usm-cmr.webex.com/usm-cmr/j.php?MTID=mc977181cac16d52546c38dc0770340>
Webinar number: 2518 078 7523
Password: scopingreview



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MODERATOR
DR. NORZALIZA IBRAHIM

USM APEX UNIVERSITI SAINS MALAYSIA

SESI PERKONGSIAN ILMU

CERAMAH PENGGUNAAN Turnitin
DI PUSAT PENGAJIAN SAINS PERGIGIAN

30 MEI 2023 | 10.30 PAGI - 11.30 PAGI
BILIK MESYUARAT PENYELIDIKAN, ARAS 2, PPSG



PENERAMAH
ENCIK ABDUL HAKIM ABDUL BASIR

USM APEX UNIVERSITI SAINS MALAYSIA

IMAGING MODALITIES FOR ORAL AND MAXILLOFACIAL TRAUMA

30TH MAY 2023 (TUESDAY) | 2.00 PM - 3.00 PM

Organised by: Research & Innovation Unit, School of Dental Sciences, USM

Join from the meeting link: <https://usm-cmr.webex.com/usm-cmr/j.php?MTID=m76024f311b47cd5fd2612edf3a762f>
Join by meeting number: 2511 407 2756
Meeting password: maxillofacial



SPEAKER
PROFESSOR DR. NORZALIZA IBRAHIM
(USM Academic Fellow)



MODERATOR
DR. NURUL HUDA BASKY RAJASEKARAN

Open to all lecturers and postgraduates student



USM APEX School of Dental Sciences, Health Campus, USM

INFLUENCE OF PATIENT POSITIONING ON THE QUALITY OF DENTAL PANORAMIC RADIOGRAPH

01ST JUNE 2023 (THURSDAY) | 2.00 PM - 3.00 PM

Organised by: Research & Innovation Unit, School of Dental Sciences, USM

Join from the meeting link: <https://usm-cmr.webex.com/usm-cmr/j.php?MTID=mc53182bb27e3da1a2ab4fbc9e18c9>
Join by meeting number: 2513 492 0680
Meeting password: radiography



SPEAKER
PROFESSOR DR. NORZALIZA IBRAHIM
(USM Academic Fellow)



MODERATOR
DR. NURUL HUDA BASKY RAJASEKARAN

Open to all lecturers and postgraduates student



USM APEX School of Dental Sciences Health Campus

CPD RESEARCH 1 HOUR TALK @ PPSG

CRANIOFACIAL MORPHOLOGY IN LATE ADOLESCENT CLASS III MALOCCLUSION PATIENTS TREATED WITH ACTIVE SKELETONIZED SUTURAL DISTRACTOR AND FACEMASK APPLIANCES (Grant No. 1001/PPSG/8012216)

TUESDAY, 6th JUNE 2023 | 8.30 AM - 9.30 AM

Organised by R&I Unit, School of Dental Sciences



Dr. Norma Ab Rahman
SCHOOL OF DENTAL SCIENCES
USM HEALTH CAMPUS

Open for all lecturers, postgraduates and undergraduates



SCAN ME

USM APEX SCHOOL OF DENTAL SCIENCES HEALTH CAMPUS

ORAL AND MAXILLOFACIAL DISEASE (OMD)

RESEARCH CLUSTER PRESENTATION

Characterization of Vascular Endothelial Growth Factor Receptors (VEGFRs) in Human Papillomavirus (HPV)-Related Oral Squamous Cell Carcinoma

Thursday | 24th August 2023 | 10.00AM - 11.00AM

MEETING INFORMATION:
Join from the meeting link: <https://usm-cmr.webex.com/usm-cmr/j.php?MTID=m8001c0864825250ae94276340c38242>
Join by meeting number: 2519 191 3383
Meeting password: researchcluster

Organised by: Research & Innovation Unit, School of Dental Sciences



PRESENTER
MUHAMMED ZUHAIMI AB AZIZ
(MSc student)



MODERATOR
DR. NURUL HUDA BASKY RAJASEKARAN



USM APEX SCHOOL OF DENTAL SCIENCES USM HEALTH CAMPUS

CPD RESEARCH 1 HOUR TALK @ PPSG

EFFICACY, HARDNESS AND ROUGHNESS OF TOOTH SURFACE AFTER TREATMENT WITH VARIOUS COMBINATIONS OF LASER BLEACHING AND HOME BLEACHING PROTOCOL: AN IN VITRO STUDY (Grant No. 304/PPSG/8315195)

TUESDAY, 29TH AUGUST 2023 | 8.30 AM - 9.30 AM

Organized by: Research & Innovation Unit, School of Dental Sciences, USM

Open for all lectures, postgraduates and undergraduates



Dr. Tahir Yusuf Noorani



QR Code for Webex link



Scan Me

Seminars & Courses

Workshop
RESEARCH PROPOSAL WRITING FOR EXTERNAL GRANTS

Thursday, 7th September 2023 | 9.30am - 4.30pm

CONFERENCE ROOM, LEVEL 2, SCHOOL OF DENTAL SCIENCES, USM

Program

9.00am - 10.30am	Talk by Prof Norazmi
10.30am - 11.00am	Break
11.00am - 12.30pm	Mentoring by Prof Norazmi
12.30pm - 2.00pm	Lunch
2.00pm - 4.30pm	Workshop continues, supervised by the facilitators

Organised by: R&I Unit, School of Dental Sciences

Professor Dr. Norazmi Mohd Nor
School of Health Sciences, USM

RESEARCH CLUSTER PRESENTATION @ PPSG

Recent Advancements in Tissue Engineering Based Mandibular Reconstruction

THURSDAY | 14th September 2023
1000-1100 (MYT), 0730-0830 (IST)

Platform: **WebEx (WebEx)**

Speaker: **Dr. Rajalakshmanan Eshwaramoorthy**
Savitribai Dental College, Chennai, Tamil Nadu, India

Moderator: **Assoc. Prof. Ts. Dr. Dasmawati Mohamad**

Meeting Information

Join from the meeting link:
<https://usm-cmr.webex.com/usm-cmr/j.php?MTID=mb9d74a79d2a37e9a83c9e4cbc5146a12>

Join by meeting number:
Meeting number: 2512 123 8722
Password: 12345
Host key: 924380

SCAN FOR THE MEETING LINK

Organised by: Biomaterials & Craniofacial Aesthetic Research Cluster

WEBEX

INNOVATION AND COMMERCIALISATION OF YOUR RESEARCH PRODUCTS

19th October 2023 (Thursday)
2.30pm - 3.30pm

Speaker: **Prof. Ir. Dr. Simala Sreekantan**
Director, Centre for Innovation & Consultation, USM

Moderator: **Dr Rosmaliza Ramli**
Lecturer, School of Dental Sciences

Meeting Information:
Meeting link: <https://usm-cmr.webex.com/usm-cmr/j.php?MTID=m85fe2855ebf33340db0db3786153f138>
Meeting number: 2510 960 7535
Password: 12345

CPD RESEARCH 1 HOUR TALK @ PPSG

FABRICATION OF ZIRCONIA-CALCIA (ZrO₂-CaO) NANOCOMPOSITE FOR DENTAL APPLICATION

(Grant No. 1001/PPSC/6012311)

TUESDAY, 31st OCTOBER 2023 | 8.30 AM - 9.30 AM

Organised by R&I Unit, School of Dental Sciences

Assoc. Prof. Dr. Zuryati Ab Ghani
SCHOOL OF DENTAL SCIENCES
USM HEALTH CAMPUS

Open for all lecturers, postgraduates and undergraduates

SCAN ME

USM APEX Pusat Pengajian Sains Pergigian
Kampus Kesihatan, USM

'CONVERTING THESIS TO MONOGRAPH: AN UPDATE'

Penceramah:
Puan Alimie Binti Liman,
Pegawai Penerbitan, Penerbit USM

MATA CPD

webex by cisco

9 November 2023 9.00 pagi - 11.00 pagi

Contact Us

-  +60 767 5721
-  abdhakim@usm.my
-  www.dental.usm.my
-  PP Sains Pergigian,
Kampus Kesihatan USM,
16150 Kubang Kerian
Kelantan, Malaysia



USM
UNIVERSITI SAINS MALAYSIA