



جامعة قطر
QATAR UNIVERSITY

الصحة
HEALTH

برنامج التطوير المهني المستمر للعاملين في القطاع الصحي
Continuing Professional Development of Health Professionals



Graphene for Biomaterials and Craniofacial Tissue Engineering

Activity Code (AGI-03-P90)

Thursday, November 4th, 2021 12:30pm-1:30pm via WebEx

Target Audience: Dentists

Aim: To discuss the recent developments and potential applications of graphene family materials for biomedical applications.

Learning objectives:

- 1) Discuss the structure and properties of graphene family materials
- 2) Describe the potential applications to improve biomaterials and promote tissue regeneration

Speakers:

- **Dr. Vinicius Rosa** Associate Professor, Vice Dean Research, Faculty of Dentistry, NUS; Faculty at Centre for Advanced 2D Materials, NUS; Faculty at Department of Material Science , NUS
- **Dr Aala Daud**, Assistant Professor, College of Dental Medicine, Qatar University Health

Event Schedule	
Speaker	Topic and schedule
Dr. Vinicius Rosa 12:30 – 1:15pm	1) Discuss the structure and properties of graphene family materials 2) Describe the potential applications to improve biomaterials and promote tissue regeneration
Moderator 1:15 – 1:30pm	Case study and discussion

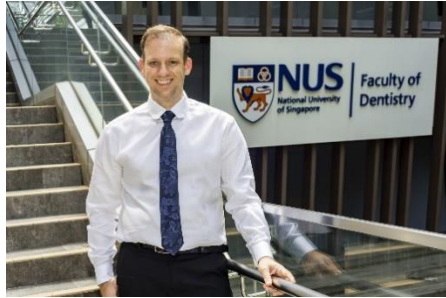
* The scientific planning committee has reviewed all disclosed financial relationships of speakers, moderators, facilitators and/or authors in advance of this CPD activity and has implemented procedures to manage any potential or real conflicts of interest.

* This activity is an Accredited group learning activity (Category 1) as defined by Department of Healthcare Professions - Accreditation Section (DHP - AS) and is approved for a maximum number of 1Hour.

* CPD-HP (QU—Health) is accredited by Department of Healthcare Professions - Accreditation Section (DHP – AS) as a provider of continuing professional development.



Dr. Vinicius Rosa



Dr Rosa is Associate Professor at the NUS Faculty of Dentistry and Faculty at NUS Centre for Advanced 2D Materials, studying the potential of graphene family materials for biomedical and dental applications. His first work in the field has shown that graphene coatings and scaffolds induce osteogenic differentiation and mineralization and elucidated the mechanosensitive pathways involved in such phenomenon. Finally, Rosa uses graphene to physically delay

the development of biofilms on titanium, making this material a potential candidate to prevent infections of implants without using antibiotics.

He has championed the development of clean engineering solutions to deposit graphene onto objects with complex shapes and sizes like dental and orthopedic implants. The work performed by Rosa has a broad audience that includes basic, medical and dental scientists and has been consistently published in premier periodicals like Nanotoxicology, 2D Materials, Carbon, Dental Materials, Journal of Dental Research and others. He received the Academy of Dental Materials Student Award (2005), George C. Paffenbarger Student Research Award (2007), IADR Distinguished Scientist Award, Young Investigator Award and the IADR/DMG Stephen Bayne Mid-career Award (2021). In July 2021, Rosa became the Vice-President of the International Association for Dental Research Dental Materials Group (DMG) and will be raised the roles of President Elect and President in the subsequent years. He is an Associate Editor for Journal of Prosthodontics and editorial board member for Dental Materials, Journal of Dental Research, Journal of Endodontics, JADA Foundational Science and others.

Dr Aala Daud

Assistant Professor, College of Dental Medicine, QU Health



Dr Aala is an Assistant Professor at the College of Dental Medicine and the College Lead for Continuous Professional development (CPD). She was the Director of the pre-clinical dental laboratories/program and the Final Year Clinical program Lead at Bristol Dental School, UK, leading on program development and implementation and assessments. Dr Aala is an assessment lead for the Royal College of Surgeons of England and a Fellow of the Faculty of Dental Trainers of the Royal College of Surgeons of

Edinburgh, UK. She has authored and co-authored multiple peer-reviewed scientific papers and presented work at many national and International conferences. Her academic career is decorated with several reputed awards.