




ABUBAKER QUTIESHAT

BDS FCGDent MSc PhD

Assistant Professor of Restorative Dentistry
College of Dental Medicine
University of Sharjah
aqutieshat@sharjah.ac.ae

Associate Member of Staff & Honorary Researcher – Dental Biomaterials
University of Dundee
aqutieshat@dundee.ac.uk

 orcid.org/0000-0002-3569-6576

 [linkedin.com/in/researchlad](https://www.linkedin.com/in/researchlad)

 scholar.google.com/aqutieshat

Dr Qutieshat is an accomplished academic in Restorative Dentistry, holding a Clinical PhD from the University of Dundee (UoD), UK. He is Assistant Professor of Restorative Dentistry at the College of Dental Medicine, University of Sharjah, where he contributes to clinical and didactic teaching, curriculum development, and supervision at undergraduate and postgraduate levels. His research in dental education has driven innovative teaching methodologies and measurable advances in educational practice. He recently authored a book with Springer Nature, *Artificial Intelligence in Higher Education: A Contemporary Examination of Illich's Theories*, critically examining AI's role in transforming educational paradigms. A Fellow of the College of General Dentistry (FCGDent), he exemplifies the highest standards of professionalism and expertise. He maintains an honorary association with UoD as an Associate Staff Member and Honorary Researcher since 2019, supporting collaborative research. Outside his professional endeavours, he finds balance and tranquillity in part-time fishing.

EDUCATION

Postdoc (Oral Simulation)
Dundee Dental School & Hospital
University of Dundee
2019

PhD Restorative Dentistry
Dundee Dental School & Hospital
University of Dundee
2012-2016

Master of Science in Dentistry - Endodontics [Distinction]
Faculty of Dentistry
Jordan University of Science & Technology
2006-2009

BDS Dentistry
Faculty of Dentistry
University of Jordan
2000-2005

FELLOWSHIPS

Fellow of the College of General Dentistry FCGDent
College of General Dentistry, UK
2023

WORK EXPERIENCE

Head of Postgraduate Education, Research & Innovation; Assistant Professor in Adult Restorative Dentistry
Oman Dental College (ODC), Muscat, Oman
Sep 2021 - Aug 2025

During my tenure at Oman Dental College (ODC), I have elevated restorative dentistry teaching through a student-centered approach, developing advanced courses in restorative dentistry, endodontics, digital dentistry, and applied dental materials that prioritize critical analysis, independent reasoning, and evidence-based practice. Simultaneously, as Head of Postgraduate Education, Research & Innovation, I transformed ODC's research culture by increasing annual Scopus-indexed publications from 4 before my tenure to over 30 in 2024, securing external grants totaling more than \$100,000, and overseeing ODC's first institutional patent, "Nanocarbon Platelets-Enhanced Portland Cement Composite". I also secured ODC's recognition in the Times Higher Education (THE) World University Rankings and Interdisciplinary Science Rankings for 2025, introduced a "Research Practicum" module resulting in multiple student publications, and modernized research infrastructure by digitizing the ethics review process and establishing an open-access institutional funding scheme. I further strengthened international collaborations, contributed to strategic planning and organizational restructuring, and established Oman's first dental research lab, thereby advancing ODC's objectives and fostering a thriving culture of research excellence.

LEADERSHIP AND ACADEMIC ROLES:

- Oman Qualifications Framework (OQF) External Reviewer, National Register of External Reviewers, Oman
- Head of Research, Innovation, and Enterprise, Oman Dental College, Oman
- Chair of the Ethics, Research, and Innovation Committee (ERIC), Oman Dental College
- The Control of Substances Hazardous to Health (CoSHH) Officer, Oman Dental College, Oman
- Ministry of Higher Education, Research and Innovation (MoHERI) Research Focal Point, Oman
- Fellow of the College of General Dentistry, UK
- Honorary Researcher, University of Dundee, Dundee, UK
- Acting Registrar, American Institute of Leadership Innovation & Technology (AILIT), USA
- Honorary Adjunct Faculty, University of Zambia, Lusaka, Zambia & University of Malawi, Zomba, Malawi
- Former Examiner & Lecturer, Jordan Medical Council (JMC) - Dentistry, Amman, Jordan
- Invited Lecturer, Dundee Dental School & Hospital, University of Dundee, UK

GRANTS AND AWARDS

- **Gold Medal & Best Invention in Medical Health.** The International Invention, Innovation and Technology Exhibition (ITEX) 2025, Malaysia, 2025
- **The National Award for Inventors.** National Intellectual Property Exhibition. Ministry of Commerce, Industry and Investment Promotion, Oman, 2024
- **Block Funding Program Award.** Ministry of Higher Education, Research & Innovation (MoHERI), Oman, 2023 & 2024. Award Amount: \$100,000
- **Faculty Member Research Grant.** Grant Number: 20190203, Jordan, 2019. Award Amount: \$100,000
- **Wiley's Certificate of Recognition for Most Downloads.** Achieved the highest downloads in the 12 months post-online publication, John Wiley & Sons, UK, 2018
- **European Federation of Preventive Dentistry Merit Award.** ConsEuro Conference, King's College London Dental Institute, London, UK, 2015.

WORK EXPERIENCE

Associate Member of Staff & Researcher

Dental Biomaterials and Cell and Molecular Biology Laboratories, Dundee Dental School, Dundee, UK
May 2019 – Present

In my role at the University of Dundee, I supervised an MSc (Prosthodontics) thesis resulting in distinction, led clinical research on chairside materials (including collagen and arginyl-glycyl-aspartic acid), and refined the SALTUS artificial mouth model, a 3D-designed, iteratively prototyped system that offers critical insights into dietary factors contributing to dental erosion. I also conducted an ethical review of UK dentists' familiarity with the Human Tissue Act, highlighting the need for clearer guidelines on using extracted teeth in research. Documented in recent publications, these endeavors demonstrate my commitment to advancing dental research, upholding ethical standards, and fostering high-quality dental education.

Assistant Professor in Conservative Dentistry

Conservative Dentistry Department, Faculty of Dentistry, Jordan University of Science and Technology
Apr 2016 – Dec 2020

During my tenure as an Assistant Professor, I taught undergraduate students in conservative dentistry (both didactic and clinical) while championing teaching excellence and curricular innovation through blended learning, flipped classrooms, and structured debates. These methods enriched students' research skills and critical assessment of scientific literature, leading to higher engagement, performance, and satisfaction. Their effectiveness was showcased in two highly cited publications, where I served as first author, highlighting the impact of these innovative teaching strategies. I regularly updated the curriculum with the latest evidence-based advances, collaborated with faculty to introduce new teaching techniques, and refined approaches based on ongoing feedback. I also played a key role in national dental health campaigns, focusing on preventive strategies and epidemiological research, ensuring that these insights informed both curriculum development and broader community oral health initiatives.

BOOKS & BOOK CHAPTERS

A Qutieshat. Artificial Intelligence in Higher Education: A Contemporary Examination of Illich's Theories. Key Thinkers in Education. Springer Nature. 2025 [Sole-authored book]

A Qutieshat, Javanmardi S, Singh G. Calcium Silicate-Based Dental Bioceramics: History, Status, and Future. In: Bioceramics in Endodontics. Wiley. 2024 [Book chapter]

PATENTS

A Qutieshat et al. Nanocarbon Platelets-Enhanced Portland Cement Composite. OM-P-2024-00508. National Intellectual Property Office (Ministry of Commerce, Industry and Investment Promotion) Oman. 2024

SELECTED RESEARCH PAPERS

- **Qutieshat A.** Fostering conceptual innovation in endodontics. *British Dental Journal.* 2025
- **Qutieshat A,** Chidambaram RS, Singh G, Al Ghammari S, Al Busaidi R. Evaluating a novel visualization device for improving file Insertion accuracy during root canal treatment. *European Journal of Dentistry* 2025
- Hijazi Z, **Qutieshat A,** Nlemorisa C, Salem A. Recycled PMMA particles from milled discs in denture base materials for improved sustainability. *BMC Oral Health.* 2025
- **Qutieshat A.** Dental Education at a Crossroad: Questioning Institutionalized Education and Embracing the Liberating Potentials of Artificial Intelligence. *Jordan Journal of Dentistry.* 2025
- **Qutieshat A,** Al Rusheidi A, Al Ghammari S, Alarabi A, Salem A, Zelihic M. Comparative analysis of diagnostic accuracy in endodontic assessments: dental students vs. artificial intelligence. *Diagnosis.* 2024
- Alsenaidi A, Al Hashmi A, Al Nabhani M, Bakathir A, Jose S, **Qutieshat A.** Health-related quality of life and satisfaction following orthognathic surgery: a prospective cohort study. *Oral and Maxillofacial Surgery.* 2024
- Al Harthy N, Al Ismaili M, **Qutieshat A.** Community Engagement and Dental Care: Early Insights from an Oman-Zanzibar Initiative. *Journal of Higher Education Outreach and Engagement.* 2024
- Al Harthy N, Al Ismaili M, **Qutieshat A.** Comparative Analysis of Dental Health Outcomes from Two Outreach Camps in Zanzibar, Tanzania: 2019 and 2023. *Oral.* 2024
- **Qutieshat A,** Salem A, Kyranides MN. Dental Cavity Grading: Comparing Algorithm Reliability and Agreement with Expert Evaluation. *International Journal of Dentistry.* 2024
- **Qutieshat A.** Unveiling the multifaceted public interest in ChatGPT: a study on societal implications and operational realities. *Journal of Digital Social Research.* 2024
- Al Razaiki K, Al Khaldi K, Al Harthy N, Al Wahaibi A, **Qutieshat A.** Evaluating the role of inorganic elements of camelus dromedarius saliva in protecting enamel against tooth surface loss. *Journal of Veterinary Dentistry.* 2024
- Alrashdan M, **Qutieshat A,** El-Kishawi M, Alarabi A, Khasawneh L. Insights into research activities of senior dental students in the Middle East: A multicenter preliminary study. *BMC Medical Education.* 2024
- **Qutieshat A,** Singh G. Breaking the error chain with SEE: cascade analysis of endodontic errors in clinical training. *Medical Education Online.* 2023
- **Qutieshat A,** Mason AG, Chadwick RG. Evaluation of *Struthio camelus* eggshell as an in vitro alternative to extracted human teeth in preliminary screening studies on dental erosion. *Clinical and Experimental Dental Research.* 2023
- **Qutieshat A,** Al Harthy N, Al Busaidi S. Antimicrobial Irrigation Solutions in Root Canal Treatment: A Glance at the Past, the Present, and the Future. *Open Dentistry Journal.* 2023
- **Qutieshat A,** Al Harthy N, Javanmardi S, Singh G, Chopra V, Aouididi R. Prevalence of dilaceration in patients presenting for initial orthodontic care: A retrospective study. *Journal of Orthodontic Science.* 2023
- Jain A, Al Wahaibi A, Singh G, **Qutieshat A.** Comparative Evaluation of Canal Transportation and Centering Ability of TruNatomy and MicroMega One RECI in Curved Root Canals. *Journal of Endodontics and Restorative Dentistry.* 2023
- Elsawaay S, Mhanni A, **Qutieshat A.** Examining dental students' performance in multiple-choice questions and pre-clinical practical exams in fixed prosthodontics: Gender differences, stress, and confidence. *Journal of Medical Education Development.* 2023
- Mhanni A, Elsawaay S, **Qutieshat A.** Development and validation of an assessment sheet for all-ceramic crown preparations: A methodological study. *Journal of Dental Research, Dental Clinics, Dental Prospects.* 2023
- Singh G, **Qutieshat A,** Al Wahaibi A. Challenges faced by undergraduate dental students during root canal treatment: a survey study. *Revista de Odontologia da UNESP.* 2023
- Al Harthy N, **Qutieshat A,** Petropoulou P, Chopra H, Figuero Ruiz E. A preventive strategy against root caries for the general dentist: a cross sectional clinical study. *Open Journal of Dentistry.* 2023
- Javanmardi S, **Qutieshat A,** Singh G, Chopra V. The diagnosis and management of a severe case of dilaceration: adhering to basic principles (clinical case). *Head and Neck Russian Journal.* 2023
- **Qutieshat A,** Al-Harthy N, Singh G, Chopra V, Aouididi R, Arfaoui R, Dileesh S, Alsadoon A, Al-Nadhiri O, Al-Busaidi S, Al-Rashdi S. Interactive Crossword Puzzles as an Adjunct Tool in Teaching Undergraduate Dental Students. *International Journal of Dentistry.* 2022
- Chopra V, Chopra H, Singh G, Javanmardi S, Alharthy N, **Qutieshat A.** Endodontic management of perforating internal resorption in a mandibular molar using sandwich technique. *Endodontology.* 2022
- Yangailo T, **Qutieshat A.** Uncovering dominant characteristics for entrepreneurial intention and success in the last decade: systematic literature review. *Entrepreneurship Education, Springer.* 2022
- **Qutieshat A,** Salem A, Aouididi R, et al. Perspective and practice of root caries management: a multicountry study - Part I. *Journal of Conservative Dentistry.* 2021
- Salem A, Aouididi R, Delatorre J, ..., **Qutieshat A.** Perspective and practice of root caries management: a multi country study - Part II: a deeper dive into risk factors. *Journal of Conservative Dentistry.* 2021
- **Qutieshat A** & Kyranides MN. Personality, learning styles and handedness: the use of the nondominant hand in preclinical operative dentistry training. *European Journal of Dental Education.* 2021
- **Qutieshat A,** Mason A, Chadwick RG. Collection of extracted human teeth in decline - Working knowledge and understanding of the Human Tissue Act by UK registered dentists. *British Dental Journal.* 2020
- **Qutieshat A,** Hiyasat A, Islam M. The effect of adding graphene oxide nanoplatelets to Portland cement: Potential for dental application. *Journal of Conservative Dentistry.* 2020
- **Qutieshat A,** Aouididi R, Arfaoui R. Design and construction of a low-cost Arduino-based pH sensor for the visually impaired using universal pH paper. *Journal of Chemical Education.* 2019
- **Qutieshat A,** Abusamak M, Maragha T. Impact of Blended Learning on Dental Students' Performance and Satisfaction in Clinical Education. *Journal of Dental Education.* 2019
- **Qutieshat A,** Hiyasat A, Darmani H. Biocompatibility evaluation of Portland cement for potential future dental application. *Journal of Conservative Dentistry.* 2019
- **Qutieshat A,** Islam M. Effects of bioactive additions on the physical properties of glass polyalkenoate cement. *Journal of Osseointegration.* 2019
- **Qutieshat A,** Mason A, Chadwick RG. In vitro simulation of erosive challenges to human enamel using a novel artificial mouth. *Clinical and Experimental Dental Research.* 2018.
- **Qutieshat A,** Maragha T, Abusamak M, Aldik O. Debate as an adjunct tool in teaching undergraduate dental students. *Medical Science Educator.* 2018
- **Qutieshat A,** Mason A, Chadwick RG. Informing a Realistic Laboratory Erosion-Testing Regime Observations. *Journal of Dentistry.* 2015

EDITORIAL & PEER REVIEW SERVICE

- Artificial Intelligence Review
- BMC Medical Education
- Clinical, Cosmetic and Investigational Dentistry
- Digital Health
- European Journal of Dental Education
- European Journal of Dentistry
- Frontiers in Dental Medicine
- Frontiers in Education
- HardwareX
- Human Behavior and Emerging Technologies
- International Dental Journal
- International Journal of Information & Education Technology
- International Journal of Manpower
- Journal of Chemical Education
- Journal of Dental Education
- Journal of Medical Internet Research
- Medical Education Online

KEYNOTE & INVITED ROLES

Invited Expert

- Event: EMEA Universities Visit Conference by Dentsply Sirona
- Role: Discussant on Technology Integration in Dental Curricula
- Geneva, Switzerland (16-18 Oct, 2024)

Keynote Speaker

- Event: First Libyan International Conference for Health Sciences (2023)
- Topic: Current trends and future directions in dental research
- Location: Tripoli, Libya

Invited Lecturer

- Title: "Reinventing Dental Materials: Exploring the Synergy of Graphene and Traditional Substrates"
- Dundee Dental School, University of Dundee, UK (26 May, 2023)

WORKSHOPS DELIVERED

Crash Course in Digital Dentistry 2024

- Sponsor: Dentsply Sirona
- Role: Developer and Conductor
- Location: ODC, Muscat, Oman

Pathway to Safety in Dental Practice 2023

- Accreditation: 3 CPD credits (OMSB)
- Role: Developer and Conductor
- Location: ODC, Muscat, Oman

Data Analysis Using IBM SPSS 2023

- Accreditation: 5 CPD credits (OMSB)
- Role: Developer and Conductor
- Location: ODC, Muscat, Oman

ABSTRACT PAPERS PRESENTED

NES Annual Virtual Conference (Scotland, UK, 2022-2024)

- Multiple: Presenter (Open Papers), Presenter (Seminars)

European Society of Endodontology (ESE) Conference

(Budapest, Hungary, 2022)

- Papers:
 - The Reinforcement of Portland Cement with Graphene Oxide Nanomaterial: Potential for Use in Vital Pulp Therapy
 - In Vitro Investigation of the Efficacy of Zinc Oxide Nanoparticles and Photodisinfection with Blue Light Against *Enterococcus faecalis*

Second International Conference of the Saudi Veterinary Medical Society (Riyadh, KSA, 2024)

- Role: Presenter (Open Paper Oral Session)

Presentation: "The Protective Mechanisms of Camelus dromedarius Saliva in Enamel Erosion and Tooth Surface Loss"

TECHNICAL PROFICIENCIES

I am proficient in SPSS, GraphPad Prism, and R for statistical analysis, and skilled in Python and Visual Basic for coding, including algorithm development, testing, and debugging. My experience with microprocessor programming and interfacing enables me to design reliable digital and robotic systems, while my 3D modeling expertise in Blender™, AutoCAD, and SketchUp supports detailed prototyping and animation. These combined abilities have allowed me to develop assistive technologies, automate processes, and efficiently address complex challenges through data-driven and innovative digital solutions.

TEACHING PHILOSOPHY

My teaching philosophy centers on a systematic, step-by-step approach that begins with engaging students through real-life clinical scenarios and leads to reflective practice and progressive mastery of clinical skills. Over time, this method has broadened into a philosophy of student partnership, where learners are actively involved in curriculum design, decision-making, and research. Collaboration based on mutual respect and shared responsibility has proven transformative, as reflected in my published studies. Recognizing each student's unique strengths, I set high expectations and tailor my methods to accommodate diverse learning styles. My research into how personality traits influence learning in dental education further guides my personalized support, creating a trust-based environment that enhances confidence and encourages deeper engagement. Student evaluations consistently highlight the effectiveness of this inclusive strategy, noting improved clinical skills and a richer understanding of course material.

REFERENCES

Emeritus Professor Graham Chadwick

Restorative Dentistry, University of Dundee, UK
r.g.chadwick@dundee.ac.uk

Professor Maja Zelihic

Dean & Vice President, School of Business, Technology & Healthcare Administration, Capella University, Minneapolis, MN
maja.zelihic@uagc.edu