

University of Aberdeen
Standard Academic Curriculum Vitae

1. PERSONAL DETAILS

Surname only	Hijazi
Staff ID number:	41020127

2. CURRENT POSITION

Current post & grade:	Senior Clinical Lecturer (Grade 8) Honorary Specialty Registrar in Oral Medicine
Date of appointment to current post:	01/02/2018. Appointment to Honorary Specialty Registrar 01/08/2016. Promotion to Senior Clinical Lecturer (Parental leave Jan – Sep 2014) 12/09/201. Appointment to Clinical Lecturer
Institute: (if applicable):	Dentistry
School:	Medicine, Medical Sciences and Nutrition

3. EMPLOYMENT HISTORY (Reverse chronological order)

Post and employer (include brief description of duties)	From	To
<p>Post-doctoral Research Associate, Department of Oral Immunology, King's College London Dental Institute, London, UK.</p> <p><i>Substantive contribution to 2 projects funded by European Commission Research Programmes FP6 and FP7:</i></p> <p><i>i. EUROPRISE, grant agreement no. 037611. European Vaccines and Microbicides Enterprise Network of Excellence</i></p> <p><i>Combined Highly Active Antiretroviral Microbicides (CHAARM), grant agreement no. 242135. Continuation from previous program EMPRO with increased emphasis on microbicide combinations.</i></p>	09/2008	09/2011
<p>Honorary Specialty Registrar, Department of Oral Medicine, Guy's & St. Thomas NHS Foundation Trust, London, UK.</p> <p><i>Assessment and management of patients on Oral Medicine General Outpatient clinics. Involvement in Oral Medicine/Dermatology joint clinics for bullous diseases, Oral Medicine/Gastroenterology joint clinics, Pain clinics and</i></p>	09/2008	09/2011

<i>multi-disciplinary clinics for Sjogren's Syndrome with input from Rheumatology and Ophthalmology. Experience in blood, whole/parotid stimulated saliva and oral soft tissue sampling. Involvement in multi-disciplinary team meetings.</i>		
Parental leave	Jan 2008	Aug 2008
Honorary Senior House Officer, Department of Oral Medicine & Oral Pathology, King's College London Dental Institute, Guy's Hospital, London, UK. <i>Oral Medicine – early training and case management.</i> <i>Oral Pathology – Involvement in cut-up and reporting sessions with consultant oversight.</i>	04/2006	04/2007
PhD student, Department of Oral Immunology, King's College London Dental Institute, Guy's Hospital, London, UK. <i>Thesis title: Role of C-type Lectins in HIV-1 Infection and Investigation of Microbicides. PhD funded by the European Commission as part of a high profile collaborative project on development of anti-HIV-1 microbicides (EMPRO). A significant component of my PhD also involved investigation of molecular mechanisms underpinning mucosal transmission of HIV-1 mediated by dendritic cells.</i>	01/2005	06/2008
Research Fellow, Department of Molecular Biology, University of Siena, Siena, Italy. <i>Substantive contribution to NIH-funded research programmes with following research objectives:</i> <i>i. Expression of recombinant proteins in Streptococcus gordonii to be used as mucosal delivery vehicle.</i> <i>ii. Inactivation of genes encoding potential virulence factors for generation of a safe vaccine delivery vector for human use.</i> <i>iii. Analysis of colonization properties of S. gordonii mutants in vitro and in vivo models.</i> <i>iv. Manipulation of S. gordonii mutants surface structures to increase immune exposure of surface-expressed recombinant antigens.</i>	06/2004	12/2004
Postgraduate training in Clinical Dentistry. School of Dental Sciences, University of Siena, Siena, Italy. <i>Pre-registration clinical experience in secondary care and policlinics (vocational training equivalent).</i>	06/2004	12/2004

4. QUALIFICATIONS (Educational and Professional) (Reverse chronological order)

Date	Title of award	Subject	Class	Awarding body
05/2013	Postgraduate Certificate in Learning & Teaching in Higher Education. Fellow of the Higher Education Academy	Learning & Teaching in Higher Education	First class (CAS 18)	University of Aberdeen
06/2008	Doctor of Philosophy	Pathology	Pass	University of London (King's College London)
12/2004	Member of the National Board of Dentists (Italy)	Dentistry	Marks 76/80	Ministry of Health (Italy)
06/2004	Doctorate in Dental Surgery	Dentistry	marks 110/110 <i>cum laude</i>	Universita' degli studi di Siena, Siena, Italy

5. MAJOR HONOURS & DISTINCTIONS

Honour/distinction	Date awarded
Prize for best presentation, British Society for Oral Medicine Winter meeting. Liverpool. Title of presentation: "Bacterial Dysbiosis in Recurrent Aphthous Stomatitis".	12/2015
Prize for best presentation, British Society for Oral Medicine Winter meeting. Birmingham. Title of presentation: "Role of drug transporters in development of antiretroviral-based microbicides".	12/2014
Prize for best presentation at Microbicides 2006 conference. (£1,000) Presented by the Head of South Africa Medical Research Council. April 2006.	04/2006
Prize for best presentation at Dental Institute Postgraduate Research Day. Presented by the Dean of Kings College London Dental Institute. March 2006.	03/2006
BDS awarded with marks 110/110 cum laude (equivalent of distinction). University of Siena, Italy.	06/2004

6. TEACHING ACTIVITY

(a) Teaching responsibilities for the last academic year

Year:

Programme/Module (and code)	Dental Health & Disease 3 (DE3031)	Dental Health & Disease 4 (DE4031)	Dental Health & Disease 5 (DE5031)
Degree title (and code)	Dental Surgery (A201)	Dental Surgery (A201)	Dental Surgery (A201)
Students UG/PG:	UG	UG	UG
Year of study:	3	4	5
Numbers:	19	20-22	19-22
Contact hours overall	46 h	64 h	41 h
My contribution:	15 h (face-to-face teaching)	29 h (face-to-face teaching)	11 h (face-to-face teaching)
Teaching & assessment responsibilities:	<p>Course design, development and delivery.</p> <p>Teaching (lectures and tutorials).</p> <p>Development/organisation of written and clinical component of formative and summative assessment (mid-year and finals, primary and re-sits).</p> <p>Accountability in QA exercises (yearly GDC reviews and ITR)</p>	<p>Course design, development and delivery.</p> <p>Teaching (lectures and tutorials).</p> <p>Development/organisation of written and clinical component of formative and summative assessment (mid-year and finals).</p> <p>Accountability in QA exercises (yearly GDC reviews and ITR)</p>	<p>Course design, development and delivery.</p> <p>Teaching (lectures and tutorials).</p> <p>Development/organisation of written and clinical component of formative and summative assessment (mid-year and finals).</p> <p>Accountability in QA exercises (yearly GDC reviews and ITR)</p>
Additional comments			

Year:

Programme/Module (and code)	Patient Care 3 (DE4007)	Patient Care 4 (DE5007)	Advanced Clinical Method 1 (ME5031)
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Degree title (and code)	Dental Surgery (A201)	Dental Surgery (A201)	Masters in Physician Associate Studies (62A1PAVZ)
Students UG/PG:	UG	UG	PG
Year of study:	4	5	1
Numbers:	~3 students per clinical session. Student cohort: 20–22	~3 students per clinical session. Student cohort: 19–22	35 (includes Advanced Nursing Practitioner trainees)
Contact hours overall	Data not available*	Data not available*	9
My contribution:	~120 contact hours	~120 contact hours	
Teaching & assessment responsibilities:	Clinical teaching involving supervision of patient assessment and case discussion. Assessment of clinical performance and provision of feedback as described in section 6b.		Simulated clinical teaching – Head & Neck examination and cranial nerve testing.
Additional comments	Clinical attachment running over term 2a/2b in BDS Year 4 and term 1 in BDS Year 5 – small group tutorial on Oral Medicine clinical practice through supervised patient assessment, observation of experienced clinicians and case discussion. *an overall clinical teaching hours database is still in development		

(If you require more columns, please paste a copy of the table above here)

(b) Summary of Teaching & Education Responsibilities in the two Academic years prior to a) above

Year:

2017–18
2016–17

Programme/Module (and code)	Principles of Disease (ME2308)	MSc Microbiology (MC5008)	Molecular Microbiology (MC3504) Microbes, Infection and Immunity (BI25M5)	Applied Immunology (IM3502) Mechanisms of disease and principles of chemotherapy (PA3802)
Degree title (and code)	Medicine (A100)	MSc Microbiology	Microbiology (C500)	Immunology (C552), Pharmacology (B210)

Students UG/PG:	UG	PG	UG	UG
Year of study:	1	Masters level	3 and 2 respectively	3
Numbers:	170	8	25 and 90 respectively	7 and 20 respectively
Contact hours overall	61 h	43 h		
My contribution:	11 h (includes time dedicated to formative exam, help session and support interviews)	2 h	6 h total	2 h total
Teaching & assessment responsibilities:	<p>Course co-ordination (review/amend course content and strategy within the context of the MBChB course, liaise with NHS and University staff to guide teaching content and delivery, review of SCEF returns and develop action plans to address identified deficiencies).</p> <p>Development/organisation of formative assessment (online quizzes and written exam) and written summative assessment (mid-year and finals, primary and re-sits).</p> <p>Teaching (lecture and help session)</p> <p>Feedback on exam performance, follow-up of borderline, weakly/poorly performing candidates, e.g. post-examination support interviews.</p>	<p>Teaching (lectures)</p> <p>Set/mark questions for written exam.</p>	<p>Teaching (lectures)</p> <p>Set/mark questions for written exam.</p>	<p>Teaching (lectures)</p> <p>Set/mark questions for written exam.</p>
Additional comments	I have had step down from the roles summarised in this table due to my taking up the post of Honorary Registrar in Feb 2018.			

Year:

2016-17

2017-18

Programme/Module	My contact hours
Dental Health & Disease courses of the final 3 years of the BDS programme (DE3031, DE4031, DE5031) and the associated Patient Care component (clinical teaching) as detailed in Tables 6b.	~295 hours
Dental Health & Disease of Year 2 of the BDS programme (DE2031).	20 h (includes time

<p>Course co-ordination (review course content and strategy within the context of the BDS course, liaise with NHS and University staff to guide teaching content and delivery, review of SCEF returns and externals examiners reports and develop action plans to address identified deficiencies).</p> <p>Development/organisation of written and practical component of formative and summative assessment (mid-year and finals, primary and re-sits).</p> <p>Development of SOPs for meeting disability provision and accommodating needs relating to E&D.</p> <p>Feedback on exam performance, follow-up of borderline, weakly/poorly performing candidates, e.g. post-examination diagnostic interviews.</p> <p>Accountability in QA exercises (yearly GDC reviews and ITR)</p>	<p>dedicated to formative and summative OSPE, post-examination feedback and diagnostic interviews)</p>
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<p>Comments (Word limit 250)</p>
<p>DE5031 and DE4031: Oral Medicine course which I have newly designed, developed and delivered in collaboration with Dr A. Crighton (Glasgow).</p> <ul style="list-style-type: none"> The didactic component includes a series of themed lectures, matched case-based sessions and multi-disciplinary symposia which have consistently received excellent feedback since its conception (see section 6c). As part of the NES-funded Scottish Dental Education On-line project, I have developed an e-learning component of online clinical cases for problem solving and formative assessment. <p>I have developed the Oral Medicine clinical component of Patient Care. This is a clinical attachment running over terms 2a/2b in BDS Year 4 and term 1 in BDS Year 5 consisting of small group tutorials on Oral Medicine clinical practice. Teaching methods include supervised patient assessment, observation of experienced clinicians and case discussion. I have developed clinical portfolio assessment sheets that served as evidence of clinical competency achievement to the GDC, who reviewed this part of the course as part of their regular inspections of the BDS programme.</p> <p>To conform to the 2012 GDC learning outcomes I have reorganised DE3002 which covers aspects of microbiology, immunology, embryology and pathology underpinning some oral diseases as well principles of radiology, surgery and pharmacology relevant to assessment and management.</p> <p>In 2014 my responsibilities were extended to course reorganisation, coordination and assessment of Dental Health & Disease 2 (DE2031) which covers principles of anatomy, physiology, microbiology and immunity of the, embryology and normal dental & craniofacial development as well as pathology concepts underpinning the most common oral diseases.</p>

<p>c) Summary of significant personal achievements in education and teaching (Word limit 250)</p>
<p>New Oral Medicine course: I have designed, developed and delivered a course in my clinical area of expertise for the BDS degree.</p> <p>Excellent student feedback: the courses which I have designed, developed and delivered since my appointment have received increasingly positive student feedback as partly documented by SCEF returns. The following are extracts of student comments of SCEF returns for DE4031:</p> <p>“Very much enjoyed time in Oral Med clinic”...“the teaching on oral medicine has been great”...“taught at an appropriate level”...“Feel that the case studies have been really helpful and feel supported in preparation for exams”...</p> <p>Exemplar Course Learning Guide – my Oral Medicine course handbook has been submitted to the GDC as example of good practice within evidence to demonstrate compliance with requirements of GDC Standard for Education 2 (Quality Evaluation & Review of the Programme).</p> <p>Pedagogic research: two full articles in the British Dental Journal and 11 abstracts in the European Journal of Dental Education presented at annual meetings of the Association for Dental Education in Europe. These publications</p>

c) Summary of significant personal achievements in education and teaching (Word limit 250)

addressed a range of topics relating to effectiveness of pre-clinical and clinical assessment in the BDS programme.

Contribution to a Scotland-wide project funded by NHS Education for Scotland: I have developed oral medicine/oral pathology case-based e-learning packages for the Scottish Dental Education On-line (SDEO) project. SDEO learning tools are available to dental students Scotland-wide on quality assurance by a national panel of experts.

Invited graduate and post-graduate level lectures and seminars to General Practitioners and Oral & Maxillofacial Surgery specialty trainees.

7. POSTGRADUATE SUPERVISION

a) Number of students

Degree	Current	Completed	Total to date
PhD	3	4	7
MSc	0	2	2

b) Details of the three most recent higher degree students supervised to completion

	Student	Degree and title of thesis	Start date	Completion date
1	Kieron Smith	PhD, The Role of Drug Transporters in the Development of Optimised Microbicides against HIV-1.	Dec 2012	Dec 2016
2	Zaid Naji Muhson	PhD, Sensitivity of Oral Biofilms to Candidate Anti-Microbial Enzymes for the Control of Oral Disease.	Oct 2014	Feb 2018
3	Innocent Afeke	PhD, Microbiota in Oral Mucosal Inflammatory Disease.	Sept 2015	Feb 2019

8. RESEARCH ACTIVITY

a) Summary of current research (Word limit 250)

I lead studies of the evolution of **Antimicrobial Resistance** and discovery of new genes for antibiotic and biocide resistance in a range of pathogens on the WHO priority list:

- Scottish collaboration (NHS Grampian, NHS Lothian, University of Dundee, Health Protection Scotland, Glasgow Caledonian University) to investigate epidemiological and genetic links between intensive use of biocides and spread of multidrug resistant Staphylococci in intensive care units. The work will inform review of infection control practices to minimise emergence of antimicrobial resistance. Manuscripts in the International-Journal-of-Antimicrobial-Agents and Nature-Microbiology. Invited manuscript by Frontier- in-Microbiology.
- Phylogenetic studies based on genome-wide analysis of national collections of multidrug resistant *Pseudomonas aeruginosa*, *Haemophilus influenzae* and ESBL-producing *Enterobacteriaceae*.

Study of the interactions of the **oral microbiome with mucosal immunity** in collaboration with the University of Siena (Italy) and metabolome analyses with the Forsyth Institute (Harvard School of Dental Medicine). Manuscript in Journal of Dental Research (1st in Dentistry) and further invited submission in JDR. Further invitation to present the work at the International Association for Dental Research (IADR) annual conference and the European Association for Oral Medicine (EAOM) as well as invitations to chair session.

Investigation of the role of the oral microbiota in systemic immune activation of HIV-infected patients.

Study of the role of **periodontal pathogens in coronary artery disease** in collaboration with the Aberdeen Cardiac Research Unit. Two joint PhD studentships. This work includes the study of epigenetic regulation of pathogenicity of periodontal bacteria in collaboration with the University of Leicester. One manuscript published in Trends-in-Cardiovascular-Medicine.

b) Summary of research in the previous three years (Word limit 250)

Novel approaches for inhibition of HIV-1 infection

- **Microbicides optimisation through innovative formulations for vaginal and rectal delivery.** Substantive funding secured as part of a collaborative EC-funded project. As lead of the workpackage aimed at investigating the role of mucosal drug transporters in distribution of mucosally-applied antiretroviral drugs (involving 3 institutions in addition to the University of Aberdeen), I was responsible for the timely implementation of project deliverables. I have senior-authored four potentially REF-returnable articles. A further article is in preparation. My research team and I have presented this work at national/international conferences and won prizes. I have also presented findings at invited seminars.
- **SULSA-funded development of a high-throughput screening assay for identification of novel HIV-1 entry inhibitors** targeting the CD4 binding site of HIV-1 envelope glycoprotein. Isolation of lead compounds with novel properties targeting the CD4 binding site of HIV-1 envelope glycoprotein in collaboration with the European Screening Centre (Newhouse, Scotland and the University of Dundee).

b) Summary of research in the previous three years (Word limit 250)

ii) Study of the oral microbiota in patients suffering from oral mucosal disease.

- **Mucosal microbiome in patients suffering from recurrent aphthous stomatitis.** Senior-authored article in J Dent Res. Work presented at the International Association for Dental Research annual conference and invitation to chair session on 'mechanism of mucosal disease'.
- **Candida species population structure in oral health and disease.** In collaboration with Prof Neil Gow (Exeter) we have conducted a longitudinal study of the structure of oral Candida species population in commensal and disease states within a large cohort of patients. Manuscript submitted.

c) Summary of significant personal achievements in research (Word limit 500)

I have secured substantive grant funding (total approx. 1 million).

I have published articles in reputed peer-reviewed journals - My work was submitted in REF2014 and several subsequent publications have been rated suitable for REF2021 including an article published in Nature Microbiology.

Members of my research team and I have been awarded prizes and scholarships at international conferences.

My national and international recognition as "leader" in my research area is demonstrated by my invited external contributions to national/international establishments as detailed in Section 13. These include:

- Invited presentations (listed in Section 9)
- Invited article submissions (listed Section 9)
- Invitations to act as external PhD examiner (listed Section 13)
- Membership of Journal Editorial Boards (details in Section 9)
- Invitation to join European Commission research funding panels (details in Section 13).

Summary of my most impactful scientific contributions as follows:

Antimicrobial Resistance:

- My work demonstrated the dominance of biocide and metal resistance genes in pathogenic lineages of multidrug resistant *Staphylococcus epidermidis* that have spread globally. These findings suggest that the intensive use of some biocides exerts a selective pressure in favour of multidrug resistant lineages. We also disclosed mobile genetic elements of *Staphylococcus epidermidis* that are likely a vehicle of resistance gene transfer to major pathogen *Staphylococcus aureus*. **Impact:** this work received wide media coverage as well as significant interest from a number of potential academic and industrial collaborators. More importantly, these findings have already contributed to the review of hospital decontamination practices.

Novel approaches for inhibition of HIV-1 infection:

- **Microbicides optimisation through innovative formulations for vaginal and rectal delivery.** Microbicides are one of the strategies pursued to prevent transmission of HIV-1 in resource-limited countries where HIV-1 is still endemic. **Impact:** Our findings on the role mucosal drug transporters in drug distribution to target cells of HIV-1 are expected to inform the development of optimised formulations of anti-HIV-1 microbicides.

Characterisation of microbiota in patients with oral mucosal disease:

1. Oral inflammatory mucosal diseases are common in the general population and have been shown to impair oral health and general quality of life. Most of these diseases remain poorly characterised and current treatment is largely palliative and not always tolerated. While new empirical treatments are tested each year, the cause of most inflammatory oral mucosal diseases remains unknown. Hijazi K. *et al.* demonstrated the correlation of reduced microbial diversity with heightened inflammatory activity in patients suffering from two oral inflammatory mucosal diseases. **Impact:** findings have raised awareness of the role of the microbiota in these conditions, and are expected to inform the study healthy microbiota repopulation strategies as adjuncts of current treatment.

In collaboration with Prof N. Gow (Exeter) we have monitored the phylogenetic landscape of oral Candida species strain types at micro-niche resolution in commensal and disease states within a large cohort of patients. **Impact:** these findings are expected to make a significant contribution to understanding the ability of different clades of *Candida albicans* to

c) Summary of significant personal achievements in research (Word limit 500)

evolve and cause disease as well as the clonality and pathogenicity of *Candida glabrata* and *Candida dubliniensis*.

d) Research grants and contracts – Please attach a copy of your PURE data with your application form. By attaching you confirm that the data is accurate at time of application.

Dates	Award holder(s)	Funding body	Title	Indicate if you are the Principal Applicant or a Co Applicant	Total Value of award	Applicant contribution (if appropriate)
Jul 2019 – Jul 2020	Hijazi K, Gould IM	NHS Endowments	Socio-Economic predictors of Antibiotic Resistance in Community- and Hospital-Associated E.coli infections in NHS Grampian	Principal applicant	£ 94,999	
Apr 2018 – Sep2019	Abu Eid R (PI), Hijazi K, Ward F	NHS Endowments	Characterisation of the microscopic and immune profiles of premalignant oral lesions.	Co-app	£11,913	
Summer 2017, Summer 2019	Morrison R, Hijazi K Hijazi K, Gibson J	Medical Research Scotland	Head & Neck cancer presentation in rural North-East of Scotland. Clinical and molecular factors associated with poor response to first line	Principal applicant	Total £4,000	

			treatment in oral lichen planus.			
Jan 2018 – Dec 2018	Hijazi K, Gould IM	NHS Endowments (Medical Microbiology Fund)	Antimicrobial Resistance in Pseudomonas aeruginosa Isolates from Cystic Fibrosis Patients.	Principal applicant	£39,650	
Sep 2017 – Sep 2019	Hijazi K, Gould IM, Laurenson I, Marwick C, Ramsay C, Reilly J	Healthcare Infection Society	Do chlorhexidine daily baths increase emergence and spread of multidrug resistant Staphylococcus in intensive care units?	Principal applicant	£98,986	
2012–2017	Hijazi K (PI), Hold G	European Commission.	Microbicide Optimization Through Innovative Formulation for Vaginal and Rectal Delivery (MOTIF).	WP lead, coordinator KCL	£13,000,000	€758,000 to University of Aberdeen
2014–2015	Hijazi K (PI), Greig I & Navratilova I	Scottish Universities Life Science Alliance.	Screening Assay for Identification of Novel HIV-1 Entry Inhibitors.	Principal applicant	£35,000	
2013–2014	Hijazi K (PI), Hold G & Foley J	Tenovus Scotland	Oral Microbiota in Patients with Recurrent Aphthous Stomatitis.	Principal applicant	£10,000	
2012–2013.	Hijazi K (PI), Greig I &	Scottish Universities	Fragment-based Screening for	Principal applicant	£23,000 (matched by	

	Ross R	Life Science Alliance, UoA Knowledge Transfer & Exchange Fund	Development of Inhibitors Preventing HIV-1 Entry.		£10,000 of KETF)	
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9. PUBLICATIONS

All of your publications in chronological order with pagination details. With multiple authorship, if one is the main author, that author's name appears in Italics. Please type **your ID number in place of your full name in Bold**. Please list by Author(s), publication title, place of publication, publisher, date of publication, number of pages.

- Please star (*) in the left margin what you consider were especially significant publications.
- Please enter a 'T' against those related specifically to publications about teaching.

Books – Authored

*Invited book chapter: **Hijazi, K.**, Carserides C. & Kelly, C. G. Challenges in Microbicide Drug Delivery: Identifying Targets and Evolving Strategies. *Drug Delivery and Development of Anti-HIV Microbicides*, pp. 91–115. 16 Oct 2014 das Neves, J. & Sarmento, B. (eds.). Pan Stanford Publishing.

Books - Edited

Books - Short Works

Conference Contributions – Refereed

Most recent published abstracts:

- ***Hijazi K**, Mukhopadhyaya I, Shaw S, Santoro F. Oral microbiome diversity is inversely correlated with mucosal inflammation. Oral presentation at 2020 IADR General Session & Exhibition, Washington, USA, 18–21 March 2020.
- Joshi C, Anderson W, Bapat R, Dawson D, Cherukara G, **Hijazi K**. Assessment of Periodontal Health in Myocardial Infarction Patients: Case–Control Study. 2020 IADR General Session & Exhibition, Washington, USA, 18–21 March 2020.
- ***Almebalrik N**, Zamudio R, Joshi C, Ironside, C, Morrisey J, **Hijazi K** & **Oggioni MR**. CopC, a new metal translocating P–type ATPase associated to copper resistance COMER element in Staphylococcus epidermidis. 29th European Congress of Clinical Microbiology and Infectious Diseases. Apr 2019, Amsterdam, Netherlands.
- ***Hijazi K**, Mukhopadhyaya I, Smith A, Oggioni MR, Gould I. Resistance to biocides in oral Staphylococcus aureus. European Association for Oral Medicine. Sept 2018. Gothenburg. Abs Fri–92 published in the Journal of Oral Pathology and Medicine (Mar 2019).
- **Hijazi K**, Morrison RW, Mukhopadhyaya I, Martin B, Gemmell M, Shaw S, Santoro F. Oral microbiome in patients with oral inflammatory mucosal disease. Presented at British Society for Oral Medicine Annual Meeting 2018, Dundee, Scotland, UK
- Mukhopadhyaya, I., Berry, S., El–Omar, E. M., Murray G. I., Iannelli F., Pozzi G., Kelly C., Hold, G. L. & **Hijazi,**

K. Transporters for antiretroviral drugs in colorectal CD4+ T cells and circulating $\alpha 4\beta 7$ integrin CD4+ T cells: Implications for HIV microbicides. Oct 2016 In: *Aids research and human retroviruses*. Presented at 'HIV Research for Prevention 2016', Chicago, USA.

- *Mukhopadhyaya, I., El-Omar, E. M., Hold, G. L. & **Hijazi, K.** Drug transporter gene expression in circulating CD4+ T cells with intestinal $\alpha 4\beta 7$ homing receptors. 2nd Digestive Disorders Federation Conference, June 2015, London.
- ***Hijazi K**, Lowe T, Meharg C, Berry S, Foley J and Hold GL. Bacterial Dysbiosis in Patients with Recurrent Aphthous Stomatitis. *J Dent Res* 2015. Abs. 3306. Oral presentation at 2015 IADR General Session & Exhibition, Boston, USA, 11–14 March 2015.
- *Moorhouse A. J., **Hijazi K.** & Gow N. A. R. *Candida ssp.* Population Structure among Oral Isolates. British Society of Medical Mycology 51st Annual Scientific Meeting. March 2015, Aberdeen.
- *Mukhopadhyaya, I., Berry, S., El-Omar, E. M., Thomson, J., Hold, G. L. & **Hijazi, K.** Characterisation of Drug Transporter Gene Expression in Colorectal Tissue and Cell Lines: Induction with Anti-retrovirals for Microbicide Optimization. Oct 2014 In : *Aids research and human retroviruses*. 30 Suppl 1, p. A201 P31.01. Presented at "HIV Research for Prevention 2014", Cape Town, South Africa.
- *Smith, K. A., Mukhopadhyaya, I., Berry, S., Hold, G. L. & **Hijazi, K.** Expression of Drug Transporters in Cervicovaginal Cell Lines and Modulatory Effect of Candidate Anti-retroviral Microbicides. Oct 2014 In : *Aids research and human retroviruses*. 30 Suppl 1, p. A201 P31.01. Competitive scholarship awarded for presentation at "HIV Research for Prevention 2014", Cape Town, South Africa.

Selected past abstracts:

- Richardson GL, **Hijazi K**, Craddock H and *Foley JI*. Applicant opinion of the information contained within the website of a graduate-entry dental school. *Eur J Dent Educ* 2013; Abs. P74. Presented at 2013 ADEE annual meeting. Birmingham, UK. T
- Foley JI, Richardson GL and **Hijazi K**. Self-, peer- and tutor-assessment of a clinical skills programme in Paed. Dent. *Eur J Dent Educ* 2013; Abs. P63. Presented at 2013 ADEE annual meeting. Birmingham, UK. T
- Foley JI, Richardson GL and **Hijazi K**. A pan-European comparison of didactic- and clinical skills teaching in relation to the management of dental caries in Paed. Dent. *Eur J Dent Educ* 2013; Abs. P2. Presented at 2013 ADEE annual meeting. Birmingham, UK. T
- Pilley A, Richardson GL, **Hijazi K** and *Foley JI*. Can admissions data predict subsequent academic and clinical performance in a graduate-entry dental school? *Eur J Dent Educ* 2012; 17: Abs. SO4. Presented at 2012 ADEE annual meeting. Lyon, France. T
- Foley JI, Richardson GL and **Hijazi K**. An analysis of admissions data and subsequent OSCE performance in a graduate-entry dental school. *Eur J Dent Educ* 2012; 17: Abs. P6. Presented at 2012 ADEE annual meeting. Lyon, France. T
- **Hijazi K**, Abu Eid R and Foley JI. Can students predict their OSCE performance within a graduate-entry school? *Eur J Dent Educ* 2012; 17: Abs. P7. Presented at 2012 ADEE annual meeting. Lyon, France. T
- **Hijazi K**, Abu Eid R and Foley JI. Analysis of inter-examiner reliability of OSCE assessments. *Eur J Dent Educ* 2012; 17: Abs. P74. Presented at 2012 ADEE annual meeting. Lyon, France. T
- *Foley JI*, **Hijazi K** and Abu Eid R. Dental students' consistency in applying the ICDAS system within Paediatric Dentistry. *Eur J Dent Educ* 2012; 17: Abs. P75. Presented at 2012 ADEE annual meeting. Lyon, France. T
- Richardson GL, **Hijazi K** and *Foley JI*. The Paediatric Dentistry experience of the first cohort of students to graduate from a Scottish graduate-entry programme: have we met the pre-requisites? *Eur J Dent Educ* 2012; 17: Abs. P35. Presented at 2012 ADEE annual meeting. Lyon, France. T
- Lopez RM, Richardson GL, **Hijazi K**, and *Foley JI*. The Restorative Dentistry experience of the first cohort of students to graduate from a Scottish graduate-entry programme: have we met the pre-requisites? *Eur J Dent Educ* 2012; 17: Abs. P36. Presented at 2012 ADEE annual meeting. Lyon, France. T
- Richardson GL, Drummie J, **Hijazi K** and *Foley JI*. Analysis of a clinical skills programme in a dental school. *J Dent Res* 2012. Abs. 439. Presented at 2012 PEF/IADR, Helsinki, Finland. T
- ***Hijazi K**, Wang Y, Jeffs S, Longstaff C, Vanham G, Haggarty B, Hoxie J, Shattock RJ and Kelly CG. DC-SIGN increases the affinity of HIV-1 envelope glycoprotein interaction with CD4. Microbicides 2010 conference.

Pittsburgh, Pennsylvania 22–25 May, 2010. *Oral presentation*

- ***Hijazi K**, Wang Y, Jeffs S, Longstaff C, Vanham G, Schols D, Balzarini J, Shattock RJ and Kelly CG. Molecular analysis of DC–SIGN–mediated enhancement of HIV infection. European Vaccines and Microbicides Enterprise – Network of Excellence. Annual Conference. Budapest, Hungary, 15–18th November, 2009. *Poster presentation*.
- **Hijazi K**, Wang Y, Van Herrewege Y, Chen H, Xu X, Stieh D, Vanham G, Longstaff C, Jones I, Schols D, Balzarini J, Shattock RJ and Kelly CG. DC–SIGN, but not Langerin, increases gp120 binding affinity to CD4. European Vaccines and Microbicides Enterprise – Network of Excellence. Annual Conference. St.Julians, Malta, 4–6th November, 2008. *Oral presentation*
- **C. Clavel**, O. Martínez–Ávila, S. Penadés, M. Stefanidou, M. Hayes, R. Shattock, **K. Hijazi**, C. Kelly. Mannose–based nanoparticles to inhibit HIV–1 gp120 interaction with DC–SIGN. XXIIIrd International Carbohydrate Symposium. Whistler, BC, Canada, July 23–28th, 2006
- ***O. Martínez–Ávila**, **K. Hijazi**, C. Clavel, C. Champion, A. Holla, A. Skerra, I. Jones, C Kelly and S. Penadés. Gold manno–nanoparticles: potential microbicides that block HIV–1 gp120 binding to DC–SIGN. Microbicides 2006 conference. Capetown, April 23–27th, 2006.
- ***Hijazi K.**, Younson J., Martinez O., Forsmann A., Jones I., Holla A., Skerra A., Beirnaert E. and Kelly C. A surface plasmon resonance–based assay to test the efficacy of candidate microbicides. Microbicides 2006 conference. Capetown, April 23–27th, 2006. Prize for best presentation presented by the head of the South African MRC for the best poster presentation.
- ***Hijazi K**, Giomarelli B, Rindi S, Iannelli F, Visai L, Speciale P and Pozzi G. Adesione dello Streptococcus gordonii alle proteine della matrice extracellulare. 12° Congresso Nazionale della Società Italiana di Microbiologia Medica Odontoiatrica e Clinica. Genova, June 20–22nd, 2004. *Oral presentation*.

Conference Contributions - Other

Departmental/Research Working Papers

- University of Aberdeen Dental School Research Strategy doc. 2017–2020. Versions 1–4
- Aberdeen Dental School Staff Training Strategy 2014–2015

Edited Works: Contributions

- **Charles Kelly**, Constandinos Carserides, Marta Zinicola, Magda Swedrowska, Stela Monk, Abhinav Kumar, **41020127 Hijazi** and Ben Forbes. Current strategies for anti–retroviral drug transport across vaginal and rectal epithelium. *Bulletin Technique Gattefosse* no. 107–2014, pp. 41–50.

Editorships – Journal

- Jan 2020–Jan 2023. Member of the Editorial Board of the Journal of Dental Research.
- Sep 2019–present. SECTION EDITOR – 'Resistance to Microbicides and Disinfectants'. Journal of Global Antimicrobial Resistance (Elsevier).

Editorships - Newsletter

Journal Papers - Academic Journals

- ***Hijazi K**, Iannelli F, Cuppone A, Desjardins D, Bosquet N, Scala C, Smith KA, Frank B, Gwozdz G, Santoro F, Pozzi G, LeGrand R and Kelly CG. *In vivo* modulation of cervicovaginal drug transporters and tissue distribution by film-released tenofovir and darunavir for topical prevention of HIV-1. 2019. *Molecular Pharmaceutics*. *In press*.
- Joshi C, Anderson W, Bapat R, Dawson D, **Hijazi K**, Cherukara G. Detection of Periodontal Microorganisms in Coronary Atheromatous Plaque Specimens of Myocardial Infarction Patients: A Systematic Review. 2019. *Trends in Cardiovascular Medicine*. *In press*.
- *Invited review – **Hijazi K**, Joshi C, Gould IM (2019). Challenges and opportunities for antimicrobial stewardship in resource-rich and resource-limited countries. 2019. *Expert review of anti-infective therapy*. vol. 15, p. 1–14. doi: 10.1080/14787210.2019.1640602.
- ***Zamudio R, Hijazi K** (corresponding author), Joshi C, Aitken E, Oggioni MR, Gould IM. Phylogenetic analysis of resistance to ceftazidime/avibactam, ceftolozane/tazobactam and carbapenems in piperacillin/tazobactam-resistant *Pseudomonas aeruginosa* from cystic fibrosis patients. *Int J Antimicrob Agents*. 2019 Jun;53(6):774–780.
- ***Zamudio R, Oggioni MR, Gould IM, Hijazi K**. Time for biocide stewardship? *Nat Microbiol*. 2019 May;4(5):732–733.
- **Saeed K**, Esposito S, Ascione T, Bassetti M, Bonnet E, Cernelutti A, Chan M, Lye DC, Cortes N, Dryden M, Fernando S, Gottlieb T, Gould I, **Hijazi K**, Madonia S, Pagliano P, Pottinger PS, Segreti J, Spera AM, International Society of Antimicrobial Chemotherapy (ISAC) Bone and Skin & Soft Tissue Infections Working Group. Hot topics on vertebral osteomyelitis from the International Society of Antimicrobial Chemotherapy. *Int J Antimicrob Agents* 2019. 54(2):125–13. doi: 10.1016/j.ijantimicag.2019.06.013
- **Saeed K**, Bal AM, Gould IM, David MZ, Dryden M, Giannitsioti E, **Hijazi K**, Meisner JA, Esposito S, Scaglione F, Tattevin P, Voss A. An update on *Staphylococcus aureus* infective endocarditis from the International Society of Antimicrobial Chemotherapy (ISAC). *Int J Antimicrob Agents*. 2019 Jan;53(1):9–15.
- **Saeed K**, Esposito S, Gould I, Ascione T, Bassetti M, Bonnet E, Bouza E, Chan M, Davis JS, De Simone G, Dryden M, Gottlieb T, **Hijazi K**, Lye DC, Pagliano P, Petridou C, Righi E, Segreti J, Unal S, Yalcin AN (2018). Hot topics in necrotising skin and soft tissue infections. *Int J Antimicrob Agents* 2018. 52 (1):1–10, doi: 10.1016/j.ijantimicag.2018.02.012.
- **Saeed K**, Bonnet E, Laurent F, Tattevin P, Leistner R, Alp E, Lye D, Vos M, Esposito E, Bassetti M, Gould IM, **Hijazi K**, Chan M, Dancer S, Willem Van Wamell, Dryden M. Update on Methicillin-resistant and Methicillin-sensitive Panton Valentin Leukocidin *Staphylococcus aureus* Skin and Soft Tissue and Bone & Joint infections. *Int J Antimicrob Agents*. 2018 Jan;51(1):16–25.
- Haigh RD, Crawford L, Ralph J, Wanford JJ, Vartoukian SR, **Hijazi K**, Wade W and **Oggioni MRO**. Phase variable restriction modification systems in periodontal pathogens *Prevotella intermedia*, *Tannerella forsythia* and *Porphyromonas gingivalis*. *Genome Announc* 2017 Nov 16;5(46).
- ***Mukhopadhyaya, I., Berry, S., El-Omar, E. M., Murray G. I., Iannelli F., Pozzi G., Kelly C., Hold, G. L. & Hijazi, K.** Transporters for antiretroviral drugs in colorectal CD4+ T cells and circulating $\alpha\beta 7$ integrin CD4+ T cells: Implications for HIV microbicides. *Mol Pharm* 2016 Sep 6;13(9):3334–40. PMID: 27230473.
- ***Hijazi K**, Mukhopadhyaya I., Abbott F., Milne K., Al-Jabri Z., Oggioni M.R. & Gould I.M. Susceptibility to chlorhexidine in multidrug resistant clinical isolates of *Staphylococcus epidermidis* from bloodstream infections. *Int J Antimicrob Agents*. 2016 Jul;48(1):86–90. PMID: 27230473.
- ***Mukhopadhyaya, I., Murray G. I., Berry, S., Thomson, J., Bruce F., Gwozdz G., Kelly C.G., Iannelli F., Pozzi G., El-Omar, E. M., Hold, G. L. & Hijazi, K.** Characterisation of Drug Transporter Gene Expression in Colorectal Tissue and Cell Lines: Induction with Anti-retrovirals for Microbicide Optimization. *J Antimicrob Chemother*. 2016 Feb;71(2):372–86. PMID: 26514157.
- ***Hijazi K**, Cuppone A, Smith K, Stincarelli M, Makinde J, De Falco G, Shattock RJ, Hold GL, Kelly CG, Pozzi G & Iannelli F. Expression of genes for drug transporters in the human female genital tract and

- modulatory effect of antiretroviral drugs. *PLoS One*. 2015 Jun 23;10(6):e0131405. PMID:26102284
- Foley JI and **Hijazi K**. Predictive Value of the Admissions Process and the UKCAT in a Graduate-Entry Dental School. *Br Dent J*. 2015 Jun 26;218(12):687-9. PMID: 26114703. T
 - ***Hijazi K**, Lowe T, Meharg C, Berry SH, Foley J and Hold GL. Mucosal Microbiome in Patients with Recurrent Aphthous Stomatitis. *J Dent Res*. 2015 Mar;94(3):875-945. PMID: 25540188. (IF=4.1)
 - *Foley JI* and **Hijazi K**. The admissions process in a graduate-entry dental school: can we predict academic performance? *Br Dent J*. 2013; 214: E4. PMID: 23348481. T
 - ***Hijazi K**, Wang Y, Scala C, Jeffs S, Longstaff C, et al. DC-SIGN Increases the Affinity of HIV-1 Envelope Glycoprotein Interaction with CD4. *PLoS One* 2011; 6(12): e28307. PMID: 21163292.
 - ***O. Martínez-Ávila, K. Hijazi, M. Marradi, C. Clavel, C. Campion, C. Kelly and S. Penadés**. Gold Manno-Glyconanoparticles: Multivalent Systems to Block HIV-1 gp120 Binding to DC-SIGN. *Chemistry*. 2009 Sep 28;15(38):9874-88. PMID:19681073
 - ***Forsman A, Beirnaert E, Aasa-Chapman MM, Hoorelbeke B, Hijazi K, Koh W, Tack V, Szynol A, Kelly C, McKnight A, Verrips T, de Haard H, Weiss RA**. Llama antibody fragments with cross-subtype human immunodeficiency virus type 1 (HIV-1)-neutralizing properties and high affinity for HIV-1 gp120. *J Virol*. 2008 Dec;82(24):12069-81. PMID: 18842738
 - ***Giomarelli B., Visai L., Hijazi K., Rindi S., Ponzio M., Iannelli F., Speziale P., Pozzi G**. Binding of *Streptococcus gordonii* to extracellular matrix proteins. *FEMS Microbiol. Lett*. 2006 Dec;265(2):172-7. PMID: 17038048

Submitted:

- Invited submission to 'Oral Microbiome' special issue of J Dent Res. ***Hijazi K**, Morrison RW, Mukhopadhyaya I, Martin B, Gemmell M, Shaw S, Abu-Eid R, Santoro F. Microbiome diversity and salivary cytokines in inflammatory mucosal disease.
- Invited submission to 'Antimicrobials and Host-Pathogen Interactions' special issue of Frontiers of Microbiology. Almebairik N, Zamudio R, Joshi C, Ironside C, Morrissey JA, **Hijazi K**, Oggioni MR. Evolution of SCCmec, COMER and ACME mobile genetic elements in *Staphylococcus epidermidis*
- Moorhouse A. J., **Hijazi K.**, Dobney K. & Gow N. A. R. Clonal Population Structure within Serial Oral Isolates of *Candida albicans*, *Candida glabrata* and *Candida dubliniensis*. Submitted to *PLoS ONE*.

Journal Papers - Professional Journals

Journal Papers - Popular Journals

- **Hijazi K**. Hospital disinfectants should be regulated like antibiotics new study suggests. The Conversation. 13 March 2019.
- March 2019. Interviews to and wide coverage by a range of mainstream national media outlets highlighting our work on staphylococcal resistance to biocides published in Nature Microbiology.

Official Reports: Whole Report

Official Reports: Part of Report

Review Articles in Academic Publications

- *Invited Book Chapter as above*
- *Invited Reviews in Antimicrobial Chemotherapy journals as above*

Reviews of Single Academic Books

Other Publications – Research

Other Publications - Research Equivalent

Other Media - Research : All Produced by Author

Other Media - Research : Part Produced by Author

Other Media - Research Equivalent: All Produced by Author

Other Media - Research Equivalent: Part Produced by Author

Exhibitions - Solo

Exhibitions - Group

Design Practice

Commissions

Public Appearances (research-related only)

Invited seminars and presentation in addition to those listed in 'Conference Contributions'

- Invited presentation European Association for Oral Medicine 2020 biannual meeting. 22–25 October 2020. Porto, Portugal.
- Oral session chair for the 2020 IADR/AADR/CADR General Session & Exhibition, Washington, Massachusetts. 18–21 March 2020. Oral Session Title: Oral Mucosal Immune Disease.
- Invited presentation. Scottish Microbiology Association. Pan Celtic 2019 meeting. Peebles, May 2019. Title: 'Resistance to Biocides in Multidrug Resistant Staphylococcus epidermidis'.
- Invited presentation. Aberdeen Immunology & Infectious Diseases Society. Aberdeen, May 2019. Title:

Time for disinfectant stewardship’.

- Invited seminar at King’s College London Dental Institute (Centre for Host–Microbiome Interactions). Mar 2018. Host: Dr D Moyes. Title: ‘The Oral Microbiota in HIV–infected Patients’.
- Invited seminar at the University of Leicester (Department of Microbial Genetics). Jan 2018. Host: Prof MR Oggioni. Title: ‘Phase variable restriction modification systems in periodontal pathogens’.
- Public Engagement with Research presentation. Café Med. Aberdeen, Jan 2018. ‘Title: Oral Cancer – Whose Problem is it?’
- Invited speaker at the 2016 Inspire Dentistry Event, King’s College London. Oct 2016. Host: Prof D Rekow. Title: ‘Why become an oral medicine academic?’
- Invited presentation to Aberdeen Dental Study Group, Aberdeen Dental Education Centre, Oct 2016, Title: “The Oral Microbiome and Oral lichen planus”.
- Invited presentation to the Scottish Microbiology Association 2016 Meeting. Glasgow, Apr 2016. Title: “Susceptibility to chlorhexidine in multidrug resistant clinical isolates of *Staphylococcus epidermidis* from bloodstream infections”.
- British Society for Oral Medicine Winter meeting. Liverpool, December 2015. Title of presentation: “Bacterial dysbiosis in recurrent aphthous stomatitis”. Prize awarded for best oral presentation.
- Invited presentation to S5 pupils at Hazelhead Academy, Aberdeen. October 2015. Title: “Research in HIV/AIDS”.
- Invited presentation to Area Dental Committee, Aberdeen Dental Education Centre, September 2015, Title: “Manipulation of oral microbiota for control of inflammatory mucosal disease”.
- Invited presentation to HRH The Princess Royal. Robert Gordon University, Aberdeen, July 2015. Title: “Mucosal Microbiome in Patients with Recurrent Aphthous Stomatitis”.
- Invited speaker at the European Screening Centre, Biocity, Newhouse. December 2015. Host: Dr. Stuart McElroy, University of Dundee. Title of Seminar: “Screening Assay for Identification of Novel HIV–1 Entry Inhibitors”.
- Invited presentation with European Commission Infection Diseases officer, EDCTP and IMI representatives. Brussels, June 2015. Title: “Drug transporters in mucosal distribution of antiretroviral–based microbicides”.
- Invited by Gattefosse Foundation (St. Priest, France) to contribute to the 2014 Annual on novel strategies for mucosal drug delivery. Title: Current strategies for anti–retroviral drug transport across vaginal and rectal epithelium.
- Oral session chair for the 2015 IADR/AADR/CADR General Session & Exhibition, Boston, Massachusetts. March 2015. Oral Session Title: Mechanisms of Mucosal Disease.
- British Society for Oral Medicine Winter meeting. Birmingham, December 2014. Title of presentation: “Role of drug transporters in development of antiretroviral–based microbicides”. Prize awarded for best oral presentation.
- 3rd MOTIF consortium meeting. Commissariat à l’énergie atomique, Paris, France. October 2014. Title of presentation: “Update on characterization of Expression of drug uptake and efflux transporters in cervico–vaginal and colorectal tissue”.
- Invited speaker at Institute of Medical Sciences, University of Aberdeen. December 2013. Host: Dr. Alex Brand. Title of Seminar: “Development of anti–HIV–1 microbicides: optimisation of existing formulations and discovery of new classes of entry inhibitors”.
- 2nd MOTIF consortium meeting. Commissariat à l’énergie atomique, Paris, France. October 2013. Title of presentation: “Expression of drug uptake and efflux transporters in cervico–vaginal and colorectal tissue”.
- Invited speaker at SIN Pathology meeting, Edinburgh Dental Institute. July 2013. Title of presentation: Oral Pathology curriculum at the University of Aberdeen.
- Invited speaker at University College London (Department of Virology). 12 February 2013. Host: Prof. Robin Weiss. Title of Seminar: Surface Plasmon Resonance analysis of HIV–1 interactions with host cell receptors.
- Invited speaker at Imperial College (Department of Infectious Diseases). 17 March, 2013. Host: Dr Simon Jeffs. Title of Seminar: Effect of DC–SIGN interaction on antigenicity of HIV envelope glycoprotein.

- Invited speaker at Glasgow Dental School. December 2012. Host: Prof Jeremy Bagg. Title of Seminar: “Development of anti-HIV-1 microbicides: optimisation of existing formulations and discovery of new classes of entry inhibitors”.
- Invited speaker at Teachers of Oral Pathology Meeting, School of Clinical Dentistry, University of Sheffield. November 2012.
- 1st MOTIF consortium meeting. Commissariat à l'énergie atomique, Paris, France. October 2012. Title of presentation: “Expression of drug uptake and efflux transporters in cervico-vaginal and colorectal tissue”.
- Invited speaker at ARIADNE Training Network hosted by Prof. Neil Gow. University of Aberdeen, July 2012. Title of presentation: “Ethics in research studies involving human participants”.

Consultancy

- 2016. Reviewer for the Oral Medicine section of ‘Oxford Assess and Progress: Clinical Dentistry’ (Oxford University Press).
- 2016. Script editing for BBC2 programme entitled “*What causes mouth ulcers and how can I prevent or get rid of them?*”, part of series “Trust me I am a Doctor”.
- 2017. Editor of 'The indigenous microbiota of the oral cavity' in Garland Science textbook entitled 'Microbiome in Health & Disease' (Taylor & Francis Group).

Citations

Web sites/Web site design/CD-ROM

Developed the original version of the University of Aberdeen dental research web site:

<http://www.abdn.ac.uk/dental/> now <http://www.abdn.ac.uk/dental/research>

Other

10. CONTRIBUTIONS TO LEADERSHIP, MANAGEMENT & ENGAGEMENT

A summary of significant contributions to the development and running of the University.

a) Institute / School/University

Dates	Nature of contribution (Word limit 150)
2019–present	Member of the Foresterhill Biosafety Committee. Responsibility for wild-type Hazard Group 2-3 pathogens.
2016–2018	-Chair of the Institute of Dentistry Research Committee. -Represented the Dental Institute in Research Governance/QA and School Research Committees. -Developed the Institute of Dentistry Research Strategy 2017-2020 and consolidated research governance aspects in liaison with SMMSN.
2016–2018	Member of the Institute of Dentistry Executive Committee.

2014–2016	-Lead for Staff Academic Development for the Dental School. -Contribution to development of standardised practice for monitoring achievement of clinical competencies.
2012–2016	Accountability in QA exercises (ITR, GDC). Interviewed by inspectors and drafted submissions relevant to my curricular roles.
2012–present	Member of education committees (curriculum-steering-group, assessment, SSLC) for Dentistry.
2015–2018	Member of MBChB education committees.
2012–present	-Internal examiner for higher research degrees. -Supervised undergraduate vacation scholars as part of Clinical Academic Development schemes.
2012–present	Recruitment of post-docs, PGR students and (since 2016) academic staff.
2013, 2015	Member of College and School Athena SWAN self-assessment-teams
2015–present	Contributed to the Staff Mentoring Scheme as Mentor
2015–present	Contributed to Regent Scheme.

11. CONTRIBUTIONS TO ENTERPRISE

Dates	Nature of contribution (Word limit 150)
2018–present	Collaboration with NovaBiotics Ltd. to undertake a clinical trial (phase I/IIa) to test the clinical applicability of a novel antifungal agent (developed by Novabiotics) in patients suffering from oro–pharyngeal candidosis. Supported by Chief Scientist Office.
2012–2017	Collaborative FP7–funded project involving 3 small–medium enterprises: Microbiotec s.r.l. (Monteriggioni, Italy), Meditox s.r.o. (Konarovice, Czech Republic), Particle Sciences Inc. (Bethlehem PA, USA). I have led a workpackage involving Microbiotec with whom I have developed a methodology for screening expression of drug transporters in mucosal tissue (Hijazi et al 2015, <i>Plos One</i>). Our findings informed optimisation of mucosally–delivered drugs by Particle Sciences, which in turn developed new drugs formulations to be tested in our model (Mukhopadhyaya et al 2015, <i>J Antimicrob. Chemother</i>)
2013–2015	Academic partner in a Scottish Funding Council–funded Innovation Voucher: collaborative project with Dentherapy (SC446406). We tested anti–biofilm properties of a new Dentherapy agent in an <i>ex vivo</i> model of dental biofilm inhibition.

12. STAFF DEVELOPMENT AND TRAINING

a) Staff development and training activities undertaken

Over the last three years (including current year) plus any significant activities in previous years.

Dates	Activity	Hours
26 Jun 2019	Medical Emergencies for Dental Practitioners	4 h
29 May 2019	Core CPD training for Dental Practitioners	6 h
2 May 2019	BISOM StR Forum 2019	6 h
9 Feb 2019	Mental Health & Suicide awareness	3 h
20 Aug 2018	Dementia Friendly Dentistry	2 h
6 Jun 2018	New GDC CPD Requirements	3 h
30 May 2018	Core CPD training for Dental Practitioners	6 h
24–25 May 2018	Critical Appraisal	10 h
2 May 2018	BSOM StR Forum 2018	5 h
31 Jan 2018	NRS Oral Dental Research Symposium & Workshop	6 h
23 Sep 2017	British Society for Oral Medicine WWOMVII Study Day. Guy's Hospital (London)	5h
20 Sep 2017	Update on BBV and implications to SCIPs	2.5 h
13 Sept 2017	GDC Fitness to Practice Update	2 h
1 Sep 2017	School of Medicine, Medical Sciences & Nutrition Education Day	3 h
31 May 2017	Core CPD training for Dental Practitioners	6 h
8 Feb 2017	Getting It Right For Every Child (GIRFEC)	2 h
1 Feb 2017	Single Best Answer Writing workshop	3 h
10 Jun 2016	Clinical Governance in Oral Medicine, Glasgow	4 h
1 Jun 2016	Core CPD training for Dental Practitioners.	6 h
11 May 2016.	Mentor Training. University of Aberdeen.	6 h
20–21 Apr 2016	SCOTPIL training (Home Office Personal Licence for animal experimentation).	12 h
14–15 Apr 2016	PPL training (Home Office Project Licence for animal experimentation).	12 h
3–4 May 2016	Leadership Development for Senior Principal Investigators.	9 h
4 Feb 2016	Drug prescribing in Dentistry.	2 h

13 Jan 2016	Creating the Seven Secrets of Highly Successful Research Students: A Workshop for PhD Supervisors.	6 h
14 Nov 2015	Licence in Dental Surgery examiners training. Royal College of Surgeons, London.	6 h
11 Sept 2012	Supervision of postgraduate students.	5 h
30 Aug 2012	Grampian Blood borne viruses Education Day.	6 h
22 May 2012	Equality and Diversity in Recruitment. University of Aberdeen.	3 h
4 May 2012	Principles of Assessment.	3 h

b) Staff development and training activities coordinated, tutored, led or initiated

Over the last three years (including current year) plus any significant activities in previous years.

Dates	Activity	Hours
Sep 2016– Jun 2017	Research seminar series for the Institute of Dentistry	Total 10 hours
Initiated/coordinated the following events in my role of lead for staff development (2014–2016)		
1 June 2016	Core CPD training for Dental Practitioners.	6 h
30 March 2016	Annual BDS Curriculum Review	6 h
23 March	Workshop for Clinical Scenario Paper Writing	3 h
4 February 2016	Drug prescribing in Dentistry.	2 h
11 Nov 2015	Posterior Layering Resin Composite Restorations	2.5 h
3 Nov 2015	Reflective practice in the BDS programme	2 h
28 Oct 2015	Clinical Photography policies and procedures	2 h
14 Oct 2015	Anterior Layering Resin Composite Restorations	2.5 h
6 Oct 2015	Facebow & Jaw Registration	2 h
23 Sept 2015	What should we teach in Restorative Dentistry	2.5 h
26 Aug 2015	Assessing Professionalism using a Programmatic Assessment Method, GDC Scope of practice	3 h
20 Aug 2015	Rotary endodontics course	5 h
June 2015	Patient safety in Dental Practice – 3	3 h

June 2015	Update on Medical Emergencies	3 h
May 2015	Evidence-based update on dental materials	3 h
April 2015	Evidence-based update on endodontics	2 h
April 2015	Patient safety in Dental Practice – 2	3 h
March 2015	GDC standards for the dental team	2 h
Feb–March 2015	BLS training	2 h x 2
Feb 2015	Patient safety in Dental Practice – 1	3 h
Feb 2015	Correct use of consent forms for treatment by BDS students	1 h x 2
Feb 2015	Impression materials & techniques: challenges	2 h
Feb 2015	Update on decontamination & infection control	1 h
Nov 2014	Introduction to the BDS curriculum to new staff	2 h
Nov 2014	Consent to Treatment	3 h

c) Conference attendance

Major conferences attended over the last three years (including current year) plus any significant participation in previous years.

Includes invitations to 2020 conferences.

Dates	Title	Nature of involvement
1–3 Oct 2020	2020 European Association for Oral Medicine biannual meeting, Porto, Portugal	Presenter (invited)
18–21 Mar 2020	2020 International Association for Dental Research General Session & Exhibition, Washington, USA.	Session Chair/Presenter
10–12 May 2019	Scottish Microbiology Association, PanCeltic Meeting 2019	Presenter (invited)
28–30 Sep 2018	2018 European Association for Oral Medicine biannual meeting, Gothenberg, Sweden	Presenter
3–4 May 2018	British Society for Oral Medicine annual meeting, Dundee Scotland, UK	Presenter
17–21 Oct 2016	HIV Research for Prevention 2016, Chicago, USA	Presenter
22 Apr 2016	Scottish Microbiology Association spring meeting 2016	Presenter (invited)
22–25 June 2015	Digestive Disorders Federation Conference, London, UK	Presenter
11–14 March 2015	2015 International Association for Dental Research General Session & Exhibition, Boston, USA.	

2013–2016	British Society for Oral Medicine Annual and Winter meetings	Presenter (prizes in 2014–15)
28–31 March 2014	HIV Research for Prevention 2014, Cape Town, South Africa	Presenter
28–31 Aug 2013	Association for Dental Education in Europe, Birmingham, UK	Presenter
11 October 2013	Educational meeting on Headache. British Association for the Study of Headache	Presenter
29 Aug–1 Sept 2012	Association for Dental Education in Europe, Lyon, France	Presenter
22–25 May 2010	Microbicides 2010. Pittsburgh, Pennsylvania, USA	Presenter
15–18 November 2009	European Vaccines and Microbicides Enterprise – Network of Excellence. Budapest, Hungary.	Presenter
4–6 November 2008	European Vaccines and Microbicides Enterprise – Network of Excellence. St.Julians, Malta.	Presenter
23–28 July 2006	XXIIIrd International Carbohydrate Symposium. Whistler, BC, Canada.	Presenter
23–27 April 2006	Microbicides 2006, Cape Town, South Africa	Presenter (prize)

d) Study leave and leave (including study leave/sabbatical)

Taken over the last three years (including current year).

Dates	Purpose
Feb 2018 – present	<p>Secondment to Honorary Speciality Registrar in Oral Medicine at 0.6 FTE (Aberdeen–Dundee split-site training) to obtain a CCST in Oral Medicine.</p> <p>This training will complement my long-standing research and teaching experience and allow me to work towards the growth of Clinical Academic Oral Medicine in the North East of Scotland. The long-term ambition is the establishment of a centre for excellence in postgraduate clinical teaching and translational research in Oral Medicine fully integrated with provision of NHS Grampian service.</p>

e) Activities and achievements

In the most recent period of leave including study leave/ sabbatical.

Dates	Purpose
Feb 2018 – present	<p>My speciality training programme has progressed very well.</p> <ul style="list-style-type: none"> I have sat the Advanced Clinical Method (Physician Associate) examinations that were milestones of the medical competency training component of my StR programme. <p>I have achieved a satisfactory outcome at my Annual Review of</p>

13. ACADEMIC AND PROFESSIONAL ACTIVITIES OUTSIDE THE UNIVERSITY

Details for the last three years (including current year) together with a summary of significant activities in previous years.
(Word limit 500)

- 2020–2023. Member of the editorial board of the Journal of Dental Research (1st ranking in Dentistry).
- 2018–19. Expert Grant Evaluator for the European Commission. Horizon 2020–SC1–2019–two–stage–RTD.
- 2019. Section Editor – Resistance to Microbicides and Disinfectants. Journal of Global Antimicrobial Resistance (Elsevier).
- Invited presentations to UK academic establishments, conferences and the European Commission as listed in section 9 (Public appearances–research related only).
- 2018–2019. Invited contributions to four multi–author reviews on behalf of the International Society of Antimicrobial Chemotherapy.
- 2019. Invited expert review on novel interventions to control antimicrobial resistance (Francis & Taylor)
- 2016–2019. External PhD examiner for the following institutions: University of Plymouth, King’s College London, University of Antwerp (Belgium), Queen Mary University of London, Newcastle University, University of Leicester, Robert Gordon University (Aberdeen).
- 2019–2020. Member of the Faculty Board of Examiners for the degree of PhD in Medical Biotechnologies, University of Siena (Italy).
- 2019. Member of the Presentation Committee for the 2019 annual meeting of the British & Irish Society for Oral Medicine.
- Invited public engagement in research presentations to general practitioners (Area Dental Committee, Aberdeen Odonto–Chirurgical Society), the general public (Café Med), school pupils (Hazelhead Academy), and HRH the Princess Royal.
- 2014–2019. Peer–reviewed post–doctoral fellowship applications for Wellcome Trust (n = 4)
- 2016, 2018. Peer–reviewed new investigator research grant applications for MRC (n=2)
- 2016–2018. I have represented the University of Aberdeen Institute of Dentistry at Scottish and UK dental research collaboration networks (Inspire UK and Scottish Oral Health Research Collaboration).
- 2018–2020. NHS Education for Scotland invite to deliver annual Oral Medicine lectures to Dental Vocational Trainees (Aberdeen).
- 2018–19. Invitation presenter at ‘Oral Medicine Study Days’ for Oral & Maxillofacial Surgery specialist trainees.
- 2015–2020. Royal College of Surgeons of England, Faculty of Dental Surgery. Examiner for the Licence in Dental Surgery Examination.
- 2016. Reviewer of Oral Medicine and Oral Pathology textbooks for Oxford University Press, Garland Science.
- 2013–present. Regular peer–review of articles for the following reputed international journals: *Journal of Virology, Antimicrobial Agents & Chemotherapy, PLoS One, PeerJ, Journal of Global Antimicrobial Resistance, Clinical Oral Investigations, Microbiome.*
- 2016–present. Regular peer–review of articles for: *Journal of Dental Research, Journal of Pharmaceutical Sciences, Journal of Hospital Infection, Molecular & Experimental Pathology, Innate Immunity, Journal of Oral Microbiology, Archives of Oral Biology, Journal of Oral Pathology & Medicine, Scientific Reports,*

Details for the last three years (including current year) together with a summary of significant activities in previous years. **(Word limit 500)**

Journal of Antimicrobial Chemotherapy.

- Jan 2016. Public engagement: consultancy for the BBC on the content of a programme entitled “*What causes mouth ulcers and how can I prevent or get rid of them?*” part of the series “Trust me I am a Doctor”.
- 2016. Reviewed abstracts for annual meetings of British Society for Oral & Dental Research
- Oral session chair for the 2015 IADR/AADR/CADR General Session & Exhibition, Boston, Massachusetts. March 2015. Title: Mechanisms of Mucosal Disease.
- 2012–2017. Inter-institutional coordination of a European Commission-funded collaborative project.
- 2012–present. Collaborative work with small-medium enterprises as detailed in section 11 (Contribution to Enterprise).
- 2012–present. I lead national and international research collaborations as described in section 8 (Research Activity).

14. MEMBERSHIP OF PROFESSIONAL AND LEARNED SOCIETIES (Word limit 250)

- Fellow of the Higher Education Academy (ref. PR059209)
- Member of the International Association for Dental Research (member ID 781577)
- Member of the British Society for Oral & Dental Research, Immunology & Microbiology Group
- Member of the British & Irish Society for Oral Medicine
- Member of the Scottish Microbiology Association
- Member of the Association of Dental Education in Europe (corporate)

15. OTHER RELEVANT INFORMATION (Word limit 250)

Administrative duties related to clinical activities:

- Liaison with primary care and secondary care colleagues for follow-up and/or inter-disciplinary patient management.
- Clinical incident reporting and liaison with clinical lead. Where appropriate report to clinical governance committee to inform SOP and policy review.
- Design and deliver internal clinical audits.

Clinical commitments prior to StR post:

Prior to my appointment to StR, I held an honorary post with NHS Grampian and contributed to the Oral & Maxillofacial Outpatient service. Specific activities were as follows:

- I managed patients with a range of Oral Medicine conditions independently or with Consultant support where appropriate.
- I supervised FY1, FY2 and DCT staff in day-to-day clinical activities.
- I participated to multi-disciplinary team meetings (MDT) meetings, e.g. Cancer MDT, Pain MDT.