



British Society for Oral and Dental Research, Annual Meeting 2021
1 - 3 September, University of Birmingham

BSODR 2021 Scientific Programme





Scientific Programme

Wednesday 1st September

Pre-conference meetings

09.00 - 10.45 Oral Microbiology and Immunology Group (OMIG) Symposium

09.00 - 11.55 Mineralised Tissue Group Symposium (MINTIG) Symposium

11.00 - 12.00 BSODR MC Meeting

12.00 - 12.45 Lunch (OMIG/MINTIG/BODR MC)

Wednesday 1st September

OMIG meeting, Edgbaston Park Hotel

09.00 **Introduction**
Professor Graham Stafford, OMIG President

09.05 **NBIC- introduction to activities**
Dr Shi Qi-An: University of Southampton, NBIC fellow

09.15 **“The oral microbiome: dynamic communities and interactions”**
Dr Shi Qi-An: University of Southampton, NBIC fellow

09.45 **“The oral microbial resistome”**
Dr David Moyes, Centre for Host-Microbiome Interactions, KCL, UK

10.15 Break

10.40 **“Host glycan metabolism by human gut microbes and pathogens”**
Dr Lucy Crouch, Institute of microbiology and infection, University of Birmingham

11.10 **“The Type IX Secretion System: a mechanism for virulence factor export in dental pathogens”**
Professor Ben Berks, Dept of Biochemistry, University of Oxford

11.55 Closing Remarks

12.00 Lunch

Wednesday 1st September

MINTIG meeting, Edgbaston Park Hotel

09.00 **Biomaterials for craniofacial tissue repair and disease modelling**
Eileen Gentleman, King's College London

09.25 **The effect of osteoporosis on bone regeneration**
Elena Calciolari, Queen Mary University of London

09.50 **The role of FGF signalling in syndromic craniosynostosis**
Erwin Pauws, University College London

10.15 **Clinical aspects of Molar Incisor Hypomineralisation (or enamel defects) in children**
Richard Balmer, University of Leeds

10.45 Close

12.00 Lunch

Scientific Programme


Wednesday 1st September Leonard Deacon Lecture Theatre

12.30	Registration, exhibition and lunch
13.30	Senior Colgate Award Chair: Professor Marcello Riggio, University of Glasgow
	Valuation of CARIES-QC-U: a child-centred caries-specific preference-based measure Helen Rogers, Newcastle University
13.45	Incorporating Macrophages into Tissue-Engineered Oral Mucosal Equivalents Improves Inflammatory Response Bethany Ollington, University of Sheffield
14.00	Wnt Signalling in The Apical Papilla is Essential for Tooth Root Development Rupali Lav, King's College London
14.15	Examining the Role of Extracellular DNA in Oral Biofilm Formation Hannah Serrage, University of Bristol
14.30	Parotid Saliva 1H-NMR Analysis for Colon Cancer Salivaomics Angela Rovera, Queen Mary University London
14.45	The Longitudinal Effect of Rituximab in Primary Sjögren's Syndrome Farzana Chowdhury, Queen Mary University of London
15.00	Junior Colgate Award Chair: Professor Rachel Waddington, Cardiff University
	Artificial Neural Networks Can Reliably Predict the Presence of Periodontitis Nasir Bashir, University of Birmingham
15.15	Three-dimensional Analysis Reveals Significant Variability in Undergraduate Full-veneer-crown Preparation Quality Har-Amrit Singh, University of Birmingham
15.30	The Effect Of Maternal Pregnancy Smoking On Offspring Molar-Incisor Hypomineralisation Qui-Yi Lim, University of Bristol

Wednesday 1st September Leonard Deacon Lecture Theatre

15.45	Dental students' perceptions of research Devki Shah, University of Sheffield
16.00	Investigating the Impact of Neutrophils on Biofilm Development Basmah Almaarik, King Saud University
16.15	President's Prize Lecture: Chair Professor Marcello Riggio Dr Elena Calciolari, Queen Mary University of London
17.00	Septodont Poster Prize Wolfson Common Room
18.00	Close
18.30	Welcome Reception Winterbourne House and Gardens, University of Birmingham

Thursday 2nd September Leonard Deacon Lecture Theatre

08.00	 ECR Breakfast Sponsored by Colgate
09.00	Opening Ceremony Chair: Professor Marcello Riggio, BSODR President
	Professor Marcello Riggio, BSODR President, University of Glasgow
9.10	Dr Josette Camilleri, Chair of LOC, University of Birmingham
9.20	Professor David Adams, Head of College, College of Medical and Dental Sciences, University of Birmingham
9.30	Dr Kirsty Hill, Head of School, School of Dentistry, University of Birmingham
9.40	Heroic Industrialisation: the origins of the 'City of a Thousand Trades' Dr Malcolm Dick, Invited Speaker
10.00	Graham Embery Lecture Chair: Professor Rachel Waddington, Cardiff University
	Regenerative dentistry - a partnership between science and the clinic Professor Anthony Smith, University of Birmingham

Scientific Programme

Thursday 2nd September
Leonard Deacon Lecture Theatre

10.45	Refreshments
11.00	Parallel Session MINTIG Award Chair: Professor Paul Anderson, Queen Mary University of London
	Importance of Dexamethasone in Mineralised Matrix Production in Saos-2 Cells Olga Yevlashevskaya, University of Birmingham
11.15	Identifying Internal Changes in the teeth in response to external challenges using X-ray Microtomography Yousaf Jamil, Queen Mary University of London
11.30	Characterisation of SDF-HAP Reactions Under Remineralising Conditions: An NMR Study Mandeep Kaur, Queen Mary University of London
11.45	The Effect of Diabetes on Osteogenic Differentiation of MSCs Nancy Hussein, University of Leeds
12.00	Investigation Of Effects Of Glass Ionomer Cements On Dentinal Lesions Treated Using Atraumatic Restorative Technique Mridula Malik, Queen Mary University of London
12.15	Human Dental Enamel Crystallite Orientation Varies Periodically Within Prisms Mohammed Al-Mosawi, University of Leeds
12.30	Chemical Speciation Analysis of Influence of Parotid Saliva on Demineralisation Paul Anderson, Queen Mary University of London

Thursday 2nd September
Forum Lecture Theatre

11.00	Parallel Session Oral Session 1 Chair: Professor Will Palin, University of Birmingham
	Synthesis of twofold LAS-Nepheline glass-ceramics for dental applications Ali Alzahrani, Saudi Arabia
11.15	Are Inert Glasses Really Inert? Saroash Shahid, Queen Mary University London
11.30	Interaction of Pulp Capping Materials with Caries Affected Dentine Kawthar Bukhari, University of Manchester
12.00	SARS-CoV-2, Dental Aerosols and Electric Handpieces at 200,000 rpm David Wood, University of Leeds
12.15	High-Precision Surface Metrology of sub-80 µm Enamel Lesions using Intra-Oral Scanning Polyvios Charalambous, King's College London
12.30	Radiopacities of Novel Radiopaque Infiltrants for Early Enamel Caries Mahmoud Hasan, Queen Mary University of London
	Main Session
12.45	Poster Session 1, Lunch and Exhibition
13.30	Dental Materials Keynote Chair: Dr Josette Camilleri, University of Birmingham
	The journey of an innovative idea: from lab bench to clinical practice. Dr Gilles Richard, Septodont



Scientific Programme

Thursday 2nd September
Leonard Deacon Lecture Theatre

- 14.30 **Parallel Session
VOCO Prize**
Chair: Professor David Wood, University of Leeds
- (Non-prize/virtual presentation)**
Improving the surface properties of Nickel-Titanium endodontic files
Beliz Ozel, Queen Mary University of London, Yeditepe University, Turkey
- 14.45 **Fluoride-releasing Glasses Based on Sodium Fluoride-modified 45S5 Bioglass**
Hasan Merie, Newcastle University
- 15.00 **A Comparative evaluation of “House of Cards” and “Cabbage Head” fluormica glass-cramics**
Maher Mohamed, Queen Mary University of London
- 15.15 Refreshments
- 15.30 **Characterisation of Fluoride Containing Bioactive Glass Composites for Dental Restoratives**
Melissa Tiskaya, Queen Mary University of London
- 15.45 **Characterization of Bioactive Restorative Materials for Restoration of Root Caries**
Diana Abdullallah, University of Birmingham
- 16.00 **Bioactivity analysis of novel fluoride releasing bioactive glass based Dental restorative composites**
Hina Khalid, Queen Mary University of London
- 16.15 **Radiopacity of CAD/CAM Materials and Resin-based Composites**
Rua Babaier, University of Manchester
- 16.30 **Cell Derived Matrices as Models to Study Gingival Reintegration**
Fauzia Quadir, Queen Mary University of London
- 16.45 **Assessment of different toothpastes on root caries using X-ray Diffraction**
Haoran Chen, Queen Mary University of London

Thursday 2nd September
Forum Lecture Theatre

- 14.30 **Parallel Session
Oral Session 2**
Chair: Dr Vehid Salih, University of Plymouth
- Effects of Blue Light on Oxidative Stress Responses in Gingival Fibroblasts**
Edward Gait-Carr, Cardiff University
- 14.45 **Cell Culture Vessels Affect the Evaluation of Ultrasound on Cells**
Dhanak Gupta, University of Birmingham
- 15.00 **Thermal Effect of Ultrasound Excitation on Culture Medium**
Lisa Shriane, University of Birmingham
- 15.15 Refreshments
- 15.30 **Oral Session 3**
Chair: Dr Ryan Moseley, Cardiff University
- Sustained release of extracellular vesicles using electrospun scaffold as novel approach for cell-free tissue engineering**
Hatim Alqurashi, University of Sheffield
- 15.45 **The Chemokine Landscape in Murine Gingiva**
Robert Reilly, University of Glasgow
- 16.00 **The Ability of Resin Modified Glass Ionomer Cements to Mineralise and Form Apatite**
Bandar Alshehri, Queen Mary University of London
- 16.15 **Nanostructural Analysis of Dentine using 3D SAXS Tensor Tomography**
Tayyaba Rabnawaz, University of Surrey
- 16.30 **Biomimetic self-assembling peptides as a treatment for hypomineralised dental enamel**
Essra Zawia, University of Leeds
- Main Session**
Leonard Deacon Lecture Theatre
- 17.00 AGM
- 19.00 **Gala Dinner**
Edgbaston Park Hotel



Scientific Programme

Friday 3rd September
Leonard Deacon Lecture Theatre

09.00	MINTIG Keynote Chair: Professor Marcello Riggio, University of Glasgow
	Molecular and Developmental Analysis of Craniofacial Morphogenesis Professor Mike Dixon, University of Manchester
10.00	Oral Session 4 Chair: Dr Melissa Grant, University of Birmingham
	Systemic inflammation and the relationship between periodontitis, edentulism and all-cause mortality Lewis Winning, Trinity College Dublin
10.15	Epithelial-Mesenchymal Inhibitors May Have A Role In Inhibiting Pathogen-Induced EMT Satvir Shoker, University of Birmingham
10.30	Epigenetic Regulation in Peri-implantitis Correlates with Disease Severity Annika Kroeger, University of Birmingham
10.45	Refreshments
11.00	An analysis of aerosol emissions from dental procedures Mark Gormley, University of Bristol
11.15	Lifestyle Traits are Associated with Oral Microbiota Composition and Function Shirleen Hallang, University of Bristol
11.30	Clinical Keynote Chair: Dr Josette Camilleri, University of Birmingham
	Dentistry - sit down you're rocking the boat Professor Farida Fortune, Queen Mary University of London
12.45	Poster Session 2, Lunch and Exhibition

Friday 3rd September
Forum Lecture Theatre

09.00	ASEID Committee Meeting
10.00	MRC Keynote Chair: Professor Paul Anderson, Queen Mary University of London
	How MRC supports oral and dental research Dr Kerry McLaughlin, Medical Research Council
10.45	Refreshments
11.00	MRC Workshop: MRC support for early career researchers Dr Kerry McLaughlin
11.45	Oral Session 7 Chair: Dr Paul Ryan, Queen Mary University of London
	The Influence of Strain Rate on Benex Vertical Tooth Extraction Mohamed Abughalia, University of Birmingham
12.00	Sentiment Analysis of Reviews Compared to Friends and Family Test Matthew James Byrne, University of Manchester
12.15	Early socioeconomic disadvantage predicts less dental care utilization in adolescence Amira Mohamed, University of Bristol
12.30	Close of Session
12.45	Poster Session 2, Lunch and Exhibition

Scientific Programme

Friday 3rd September
Leonard Deacon Lecture Theatre

- 13.30 **OMIG Keynote**
Chair: Professor Marcello Riggio, University of Glasgow
- Stick with me: Adhesion and cohesion in dental plaque**
Dr Nick Jacobovics, Newcastle University
- 14.30 **Parallel Session
Oral Session 5**
Chair: Professor Graham Stafford, University of Sheffield
- Broad-spectrum Antimicrobial Effects of a Novel Quaternary Ammonium Compound**
Alexander Brezhnev, Hong Kong
- 14.45 **Response of Salivary Glucose and pH in the Oral Microbiome**
Nailê Damé-Teixeira, Brazil/Leeds
- 15.00 **Biodegradation of zirconia by Fusobacterium nucleatum**
James Kit-Hon Tsoi, Hong Kong
- 15.15 **Parallel Session
Oral Session 6**
Chair: Dr Anousheh Alavi, GSK
- TiO₂/CaO Effects on Crystallization and Flexural Strength of Leucite Glass-ceramics**
Mustafa Al Musali, Queen Mary University of London
- 15.30 **Stability of Veneered and Implant-supported PEEK FDPs with Free-end Unit**
Danka Micovic Soldatovic, Germany
- 15.45 **Characterisation of the film thickness and the bond strength reliability of a bioactive Calcium Aluminate/Glass-Ionomer cement (CaAl/GIC) to lithium disilicate (LD) and dentine**
Angelle Lonnia Esparon, Queen Mary University of London
- 16.00 **Multi-scale Synchrotron X-ray Study of Dentine Demineralisation**
Nathanael Leung, University of Surrey
- 16.15 **Biocompatibility of Silver Nanoparticles Gel as an Endodontic Intra-Canal Medicament**
Ahmed Mahmoud, Egypt/Leeds

- 16.30 **Desmoglein-3 Induces Phospho-YAP Expression and Controls Oral Cancer Cell Migration**
Usama Ahmad, Queen Mary University of London
- 16.45 **4NQO-Induced Oral Carcinogenesis in Wistar Rats: A Systematic Literature Review**
Vivian Petersen Wagner, University of Sheffield

Friday 3rd September
Forum Lecture Theatre

- 14.30 **Parallel Session
Oral Session 8**
Chair: Professor Robert Allaker, Queen Mary University of London
- The effect of bee propolis mouthwash on markers of oral health**
Zoe Brookes, University of Plymouth
- 14.45 **Adipocytes stimulate tumour cell motility through secreted factors including adipokines**
Basma H. Ali, University of Sheffield
- 15.00 **Effects of Sphingosine-1-phosphate Receptor 2 (S1PR2) on the Behaviour of Three Oral Squamous Cell Carcinoma (OSCC) Lines**
Adjabhak Wongviriya, University of Birmingham
- 15.15 Refreshments
- 15.30 **Parallel Session
Oral Session 9**
Chair: Dr Sarah Kuehne, University of Birmingham
- Copper-containing Implant Materials offer Antimicrobial and Pro-osteogenic Properties**
Javeria Khalid, Queen Mary University of London
- 15.45 **Impact of Hyperglycaemia and Hyperkalaemia on Fusobacterium Nucleatum Polymorphism Behaviour**
Ruba Abusurur, University of Birmingham
- 16.00 **Interplay of Streptococcus gordonii Adhesins in the Pathogenesis of Endocarditis**
Angele Nobbs, University of Bristol
- 16.15 **The Impact of C. albicans and Sucrose on Polymicrobial Cariogenic Biofilm Development**
Khulood Almansour, King's College London
- 16.30 **Modulation of Oral Bacterial Metabolism by Proline**
Leanne Cleaver, King's College London