

60th Annual Scientific Meeting and Exhibition of the British Society for Oral and Dental Research

Bath Spa Assembly Rooms and Hilton Hotel, Bath, Somerset, England.

Monday 9th September – Wednesday 11th September 2013

British Division of the International Association for Dental Research



British Society for Oral and Dental Research 60th Annual Scientific Meeting and Exhibition

Bath Spa Assembly Rooms and Hilton Hotel
Monday 9th – Wednesday 11th September 2013

Hosted by
The University of Bristol
School of Oral and Dental Sciences
bristol.ac.uk/dental

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Lindsay C. Dutton
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Laura Greenwood
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Scientific Groups, Presidents and Contacts 2013

Behavioral, Epidemiologic and Health Services Research (BEHSR): Blanaid Daly
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Dental Materials Group (DMG): Owen Addison (o.addison@bham.ac.uk)

Mineralised Tissue Research Group (MINTIG): Rachel Waddington
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Oral Biology: Gordon Proctor (gordon.proctor@kcl.ac.uk)

Oral Medicine and Pathology Group (OMPG): Paula Farthing (P.Farthing@sheffield.ac.uk)

Oral Microbiology and Immunology Group (OMIG): Dave Spratt (d.spratt@ucl.ac.uk)

Periodontal Research Group (PRG): Francesco D'Aiuto (f.daiuto@eastman.ucl.ac.uk)

Business Meetings, BSODR Bath 2013

OMIG: Monday 9th September, 13:00, Tea Room (Assembly Rooms)

BEHSRG: Tuesday 10th September, 13:00, Card Room (Assembly Rooms)

OMPG: Tuesday 10th September, 13:00, Ball Room (Assembly Rooms)

MINTIG: Tuesday 10th September, 15:30, Gloucester Room (Hilton Hotel)

BSODR: Tuesday 10th September, 17:00, Tea Room (Assembly Rooms)

GENERAL INFORMATION

Location

The meeting will take place at the Hilton, Walcot St, Bath, BA1 5BJ and the Bath Assembly Rooms, Bennett St, Bath, BA1 2QH.

Conference Badges

Please wear your name badge at all times to promote networking, help staff in identifying you, for entrance to the Assembly Rooms, and for entrance to the Pump Room Dinner.

Maps and Directions

In the back of your badge holder there is a folded Programme Summary together with a map of the immediate area and some useful information.

Assistance

Look out for an assistant wearing a bright yellow sash for help with directions, programme, posters, audio-visual, computers, seating etc. Use the Registration Desk for replacement programmes or badges, restaurant information, invoicing, payments, ticketing transfers.

Scientific Session Protocol

Photography, audio or video recording of the scientific sessions is not permitted.

Internet Access

Wireless internet access is available throughout the Assembly Rooms and in the lobby of the Hilton Hotel. In room internet access at different hotels is subject to individual hotel provision.

Oral Presentations

Please provide an electronic copy of your talk to a member of the AV team in the Slide Preview Rooms located in the Assembly Rooms or Hilton Hotel, according to where you are speaking. Your talk must be loaded onto the presentation computer at least 60 min before the start of the session in which you are speaking. Talks will be subject to strict timing by light box: Green (to 10 min), Orange (at 10 min), Red (at 15 min end). Symposium speakers only are permitted laptops.

Poster Presentations

Posters will be displayed on Tuesday from 10:00 to 16:00 in the Ballroom. Presenters may mount their posters on their numbered boards either on Monday evening (up until 20:00) or on Tuesday morning (from 08:00). Presenters are requested to attend their posters during morning (10:30-11:00) and afternoon (15:30-16:00) refreshment breaks. Buffet lunch will also be served on Tuesday in the vicinity so there will be further opportunities for presenters to discuss their work.

Conference Meals

Breakfast is served at the Hotels. Coffee and tea will be available throughout the day at the Hilton Hotel, in addition to the designated refreshment breaks listed in the programme. Buffet lunch will be provided on Tuesday at the Octagon area of the Assembly Rooms from 13:00.

Social Events

A reception will be held in the Assembly Rooms (Octagon and Tea Room) on Monday 9th starting at 18:00. Complimentary drinks will be served in the first instance, including a selection of local ale and cider, wines, and soft drinks, with a cash bar available throughout until 22:30. Food will be provided by a local bakery chef with a selection of meat or vegetarian pies and mash.

Conference Dinner (not included in Registration fee)

This will be held on Tuesday 10th starting at 19:00 at the Roman Baths and Pump Room. Complimentary drinks will be served alongside the Roman Baths (**please note** that floors around the Baths are uneven), and a three course dinner with wine and coffee will be served in the Pump Room beginning 20:00. Cash bar will be available all evening (20:15-23:30). Prize awards will be announced at this event.

Messages

All messages will be posted on the board near the Registration Desk in the Assembly Rooms. Messages for delegates can be left on telephone number 07779989934. If you have any queries please do not hesitate to contact a member of staff wearing a yellow sash.

Parking

Car parking is available at the Podium Car Park next door to the Hilton Hotel. Guests have to take a token to enter the car park and then this token must be validated by reception at the Hotel. The Validation amends the price to £15.00. This is payable directly upon exiting the car park (and not the Hotel). Other car park locations are shown on the local map provided.

Taxis

Bath Spa is easy to cover on foot but, if needed, local taxi services include: Abbey Taxis 01225 444444, or Bath Taxis 01225 650018.

Eating and Drinking in Bath

A short list of restaurants, cafes, bars and pubs is available in your Registration Bag.

Sites to Visit

Bath Visitors guide suggestions are included in your Registration Bag, but highlights are: Pulteney Bridge and Weir, The Circus, Royal Crescent, Pump Room, and Roman Baths (fed by the only natural thermal spring in Britain).

BSODR Meeting 2013
Bath Spa Assembly Rooms and Hilton Hotel

SCHEDULE OF EVENTS

Monday 9th September

| | | |
|-------------|--|---|
| 09:00-11:00 | Trades exhibition set-up | Assembly Rooms (AR) |
| 11:00-17:00 | Registration open | Assembly Rooms (AR) |
| 11:00-17:00 | Slide Preview Rooms open | AR and Hilton Hotel (HH) |
| 11:00-12:00 | Prize posters set-up open | Yale Room (HH) |
| 16:00-20:00 | Main posters set-up open | Ballroom (AR) |
| | | |
| 14:00-17:30 | Exhibition | Octagon (AR) |
| | | |
| 14:00-17:00 | Poster prizes (closed session) Unilever, Clinical and ABOAMS | Yale Room (HH) |
| | | |
| 14:00-15:30 | Symposium* OMIG | Tea Room (AR) |
| | | |
| 14:00-15:30 | Oral Papers Dental Care Professionals MINTIG Prize session Tissue Engineering VOCO I | Ballroom (AR) Card Room (AR) Gloucester Room (HH) Somerset Room (HH) |
| | | |
| 15:30-16:00 | Refreshments | Octagon (AR) and HH |
| | | |
| 16:00-17:30 | Oral Papers Oral Microbiology Lay Experience of Oral Health VOCO II | Tea Room (AR) Card Room (AR) Somerset Room (HH) |
| | | |
| 18:00-23:00 | Reception Professor Tim Watson, President BSODR Professor Peter Mathieson, Dean Faculty of Medicine and Dentistry University of Bristol Professor Angus Walls, GSK/ODRT Awards | Octagon and Tea Room (AR) |

Tuesday 10th September

| | | |
|-------------|---|--|
| 08:00-16:00 | Registration open | Assembly Rooms and Hilton Hotel |
| 08:00-16:00 | Slide Preview Rooms open | AR and HH |
| 08:00-10:00 | Poster set-up open | Ballroom (AR) |
| 09:00-16:00 | Exhibition | Octagon (AR) |
| 09:00-10:30 | Opening and Plenary Lecture Professor Paul Martin, University of Bristol | Tea Room (AR) |
| 10:30-11:00 | Refreshments | Octagon (AR) |
| 10:30-16:00 | Poster Viewing Presenters to attend 10:30-11:00 and 15:30-16:00 | Ballroom (AR) |
| 10:30-16:00 | Senior Colgate Prize Competition | Tea Room (AR) |
| 11:00-13:00 | Junior Colgate Prize Competition | Card Room (AR) |
| 11:00-13:00 | Oral Papers Periodontal Research | Somerset Room (HH) |
| 13:00-14:00 | Buffet Lunch and Posters | Octagon (AR) |
| 14:00-15:30 | Symposia* BEHSRG/Periodontal Research Group MINTIG/Oral Biology Group | Card Room (AR) Gloucester Room (HH) |
| 14:00-15:30 | Oral Papers Glasses | Somerset Room (HH) |
| 15:30-16:00 | Refreshments | Octagon (AR) and HH |
| 16:00-17:00 | Graham Embery Lecture Professor Iain Chapple, University of Birmingham | Tea Room (AR) |
| 17:00-17:30 | BSODR Annual Business Meeting | Tea Room (AR) |
| 19:00-23:30 | BSODR 60th Anniversary Dinner Professor Tim Watson, President BSODR Professor Helen Whelton, President IADR Prize Awards | Roman Baths and Pump Room |

Wednesday 11th September

| | | |
|-------------|---|--|
| 08:00-10:00 | Registration open | AR and HH |
| 08:00-11:00 | Slide Preview Rooms open | AR and HH |
| 09:00-13:00 | Exhibition | Octagon (AR) |
| 09:30-10:30 | TC White Lecture Dr Imran Shafi, University of Glasgow | Tea Room (AR) |
| 09:00-10:30 | Oral Papers General Dental Practice Dentistry Dentine, Enamel and Pulp | Card Room (AR) Gloucester Room (HH) Somerset Room (HH) |
| 10:30-11:00 | Refreshments | Octagon (AR) and HH |
| 11:00-13:00 | Oral Papers Oral Medicine & Pathology Periodontal Pathogenesis BEHSRG Dental Materials | Tea Room (AR) Ballroom (AR) Card Room (AR) Somerset Room (HH) |
| 13:00 | Meeting Ends | |

*SYMPOSIA PROGRAMMES (see also pages 10-12)

Caries Revisited (*Oral Microbiology and Immunology Group*). Speakers: David Bradshaw (GSK), Wim Crielaard (ACTA, Netherlands), Shauna Culshaw (Glasgow), Richard Watt (UCL). *Monday 9th Sept. 14:00-15:30, Tea Room.*

Are Periodontal Diseases a Public Health Problem? (*Joint Behavioural, Epidemiological and Health Sciences Research Group and Periodontal Research Group*). Speakers: Peter Robinson (Sheffield), Francis Hughes (KCL), Paul Batchelor (UCLH), Sue Gregory (Deputy Chief Dental Officer, PHE). *Tuesday 10th Sept. 14:00-15:30, Card Room.*

The Enamel-Saliva Interface -The Role of Salivary Peptides in Protecting Enamel (*Joint Mineralized Tissue Research Group and Oral Biology Group*). Speakers: Gordon Proctor (KCL), Paul Anderson (QMUL), Michele Barbour (Bristol), Gary Burnett (GSK). *Tuesday 10th Sept. 14:00-15:30, Gloucester Room, Hilton.*

Conference Sponsors.

The Conference Organizers acknowledge the generous support from the following organizations



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SCIENTIFIC SYMPOSIUM

Monday 9th September

Oral Microbiology and Immunology Group

Tea Room, Assembly Rooms, 14:00-15:30

Sponsored by GlaxoSmithKline

CARIES REVISITED

Chair: D. Spratt (Eastman Dental Institute, UCL)

- 14:00 Diet, caries and the oral microbiota: new perspectives
D. Bradshaw (GlaxoSmithKline)
- 14:20 Analysis of plaque by high throughput sequencing techniques
W. Crielaard (ACTA, Netherlands)
- 14:50 Immune protection – *Streptococcus mutans*
S. Culshaw (University of Glasgow)
- 15:10 Public health aspects of caries - a new perspective
R. Watt (University College London)

Aim: To inform the scientific and clinical community of the recent advances in caries research. We have created a "one stop shop" for BSODR delegates to update themselves on where we are currently with caries research. The symposium will consider the nature of bacterial communities present and how they change in health and disease (Crielaard), how the immune system protects (Culshaw), and new measures for caries detection, control and prevention.

SCIENTIFIC SYMPOSIUM

Tuesday 10th September

BEHSR Group and Periodontal Research Group.

Card Room, Assembly Rooms, 14:00-15:30

Sponsored by Colgate-Palmolive

ARE PERIODONTAL DISEASES A PUBLIC HEALTH PROBLEM?

Chair: I. Needleman (Eastman Dental Hospital, UCL)

- 14:00 Periodontal diseases as a public health problem: review of the data
P. G. Robinson (University of Sheffield)
- 14:20 Periodontal diseases are a public health problem
F. Hughes (King's College London)
- 14:40 Periodontal diseases are not a public health problem
P. Batchelor (UCL Hospital)
- 15:00 Periodontal diseases within primary care dentistry
S. Gregory (Public Health England)

Aim: This symposium will take the form of a debate. To be a public health problem, a disease must be widespread or serious; the consequences to the community and individuals must be severe; the costs to the community and to individuals must be great; and effective methods must be available to prevent, alleviate or cure them. The data pertaining to these four criteria will be presented and will then be interpreted by Francis Hughes and Paul Batchelor, adopting strong positions for or against periodontal diseases as a public health problem. Ms Sue Gregory will consider periodontal diseases within Primary Care Dentistry. Time will be left for audience contributions to the debate.

SCIENTIFIC SYMPOSIUM

Tuesday 10th September

MINTIG and Oral Biology Group

Gloucester Room, Hilton Hotel, 14:00-15:30

ENAMEL-SALIVA INTERFACE: ROLE OF SALIVARY PEPTIDES IN PROTECTING ENAMEL

Chair: R. Waddington (Cardiff University)

- 14:00 Changes in salivary proteins associated with dental erosion
G. Procter (King's College London Dental Institute)
- 14:30 Salivary protein protection of enamel surfaces
P. Anderson (Queen Mary, University of London)
- 14:50 Novel nanofunctional glass ionomer cements and their interaction with artificial saliva
M. E. Barbour (University of Bristol)
- 15:10 Factors influencing the physical properties of salivary pellicles
G. Burnett (GlaxoSmithKline)

Aim: Dental hard tissue diseases remain a significant problem. There is increasing awareness of the role of the components of saliva, particularly proteins, in protecting enamel surfaces from carious and erosive challenges. This symposium seeks to address the roles of salivary protein, and how these functions can be emulated in the development of novel therapeutic treatments.

PLENARY and PRIZE LECTURES

Tuesday 10th September

Introductory address and Plenary Lecture

Tea Room, Assembly Rooms, 09:00-10:30

P. MARTIN (Professor of Cell Biology, University of Bristol)
Parallels between inflammation in tissue repair and cancer initiation

Tuesday 10th September

Graham Embery Lecture

Sponsored by Unilever

Tea Room, Assembly Rooms, 16:00-17:00

I. CHAPPLE (Professor of Periodontology, University of Birmingham)
The real Webs of Science - Neutrophil extracellular traps (NETs): a new paradigm in innate immunity

Wednesday 11th September

T. C. White Lecture

Tea Room, Assembly Rooms, 09:30-10:30

I. SHAFI (Royal Alexandra Hospital and University of Glasgow)
Computer prediction systems for planning the surgical correction of facial deformities

SCIENTIFIC PROGRAMME

MONDAY 9 SEPTEMBER 2013

Seq#: 1 Monday, 9 September 2013, 2:15 PM - 3:30 PM
Oral Session, Ballroom (Assembly Rooms, Bath)

Sponsored by Philips

Scientific Groups - *Dental Care Professionals*

Chairperson: M. Ross

0002 2:15 PM Predictors of Attrition in the Dental Nurse Workforce. S. TURNER* and M. ROSS (*University of Edinburgh, Scotland*)

0003 2:30 PM Benefits and Risks of Direct Access: What's the Evidence? S. TURNER*, S. TRIPATHEE, and S. MACGILLIVRAY (*Dundee Dental School, Scotland*)

0004 2:45 PM Dental Auxiliaries for Dental Care. T.A. DYER*, P. BROCKLEHURST, A.-M. GLENNY, L. DAVIES, A. ISSAC, M. TICKLE, and P. ROBINSON (*University of Sheffield, England*)

0005 3:00 PM Performance of Dental Therapy Students in an Operative Skills Course. A. JOWETT*, M. PARSONS, and J. RUSHFORTH (*University of Sheffield, England*)

0006 3:15 PM Disgust and Attitudes Towards Inpatient Oral Care. I. JOHNSON*, E. TREASURE, and A.P. SMITH (*Cardiff University, Wales*)

Seq#: 2 Monday, 9 September 2013, 2:00 PM - 3:30 PM
 Oral Session, Card Room (Assembly Rooms, Bath)

Scientific Groups - *MINTIG Prizes and Orals*

Chairperson: R. Waddington

0007 2:00 PM Bioactive Glasses For The Treatment of Dentine Hypersensitivity. M. MNEIMNE*, R. HILL, D.G. GILLAM, J. EARL, and R. LANGFORD (*Dental Institute, Barts and The London School of Medicine and Dentistry, Queen Mary University of London, England*)

0008 2:15 PM Factors Affecting Dietary Acid-based Erosion: A Nano-indentation Investigation. J. PATTEM* (*University of Newcastle-upon-Tyne, Newcastle upon Tyne, England*)

0009 2:30 PM Differentiation of Dental Pulp Progenitor Cells on Conditioned Dentine Surface. L. SADAGHIANI*, H. GLEESON, R. WADDINGTON, A. GILMOUR, C.D. LYNCH, and A. SLOAN (*Cardiff University, Wales*)

0010 2:45 PM Dissolution Products from MTA Release Novel Growth Factors from Dentine. P.L. TOMSON*, M. SANDHOLZER, P. LUMLEY, T. SUI, A. KORSUNSKY, A. SMITH, and P. COOPER (*University of Birmingham, Oral Biology, England*)

0011 3:00 PM Micro- and Nano-structure of Enamel Affected by Hypomaturation Amelogenesis Imperfecta. S. SIDDIQUI*, G. DAVIS, and M. AL-JAWAD (*Queen Mary University of London, England*)

0012 3:15 PM The Effect of Different Acids On Erosion and Erosion/Abrasion. M. MISTRY*, R. MOAZZEZ, R. AUSTIN, and D. BARTLETT (*King's College London, England*)

Seq#: 3 Monday, 9 September 2013, 2:00 PM - 3:30 PM
Oral Session, Somerset (Hilton Hotel, Bath)

Scientific Groups - *VOCO Orals*

Chairperson: T. Watson

0013 2:00 PM Mechanical and Adhesion Properties of Modified Dental Composites. S. LIAQAT* and A. YOUNG (*University College London, England*)

0014 2:15 PM Preparation and Characterisation of a Silver-doped Nanoscale Hydroxyapatite Paste. C. WILCOCK*, M. FATIMA, G. STAFFORD, C.A. MILLER, Y. RYABENKOVA, G. MOEBUS, and P.V. HATTON (*University of Sheffield, England*)

0015 2:30 PM Electrospun Poly(lactide-co-glycolide): Hydroxyapatite Composite Membranes Intended for Bone Tissue Regeneration. H. DROUIN*, C.A. MILLER, P. GENTILE, P. GENEVER, and P.V. HATTON (*University of Sheffield, England*)

0016 2:45 PM Chlorhexidine-Hexametaphosphate Nanoparticles as Antimicrobial Coatings for Dental Implants. N.J. WOOD*, H.F. JENKINSON, D. O'SULLIVAN, S. DAVIS, and M. BARBOUR (*Bristol Centre for Functional Nanomaterials, England*)

0017 3:00 PM Polymerisation Shrinkage-Exotherm of Commercial and Experimental Provisional Restorative Materials. B. ABDULMOHSEN*, D. SAMARAWICKRAMA, and M. PATEL (*Queen Mary University of London, England*)

0018 3:15 PM Using Solid-State NMR for Structural Characterisation of Dental Glass-ceramics. J. ALMUHAMADI*, N. KARPUKHINA, R. HILL, and M. CATTELL (*Institute of Dentistry, Barts and The London School of Medicine and Dentistry, Queen Mary University of London, England*)

Seq#: 4 Monday, 9 September 2013, 2:00 PM - 3:45 PM
 Oral Session, Gloucester (Hilton Hotel, Bath)

Scientific Groups - *Tissue engineering*

Chairperson: F. Hughes

0019 2:00 PM Characteristics of Single Colony-Derived Progenitor Cells from Deciduous Pulp. C. PLATT*, A. ADKINS, J. SIMPSON, and S. CREAM
(University of Central Lancashire, Preston, England)

0020 2:15 PM Mesenchymal Notch Signaling Coordinates Stem Cell Fate During Tooth Development. H. ZHUANG, D. SINGER, S. ARDU, I. KREJCI, and B. HU*
(Plymouth University Schools of Medicine and Dentistry, England)

0021 2:30 PM IGF Axis Expression during Osteogenic Differentiation of Dental Pulp Cells. H. ALKHARABI*, R. EL-GENDY, D. DEVINE, and J. BEATTIE
(University of Leeds, England)

0022 2:45 PM Dental Pulp Stem Cells Promote Neural Regeneration Following Injury. B. MEAD, M. BERRY, A. LOGAN, W. LEADBEATER, and B.A. SCHEVEN*
(University of Birmingham, England)

0023 3:00 PM Effect of PDGF-BB on PDL MSC Proliferation and Differentiation. M.S. GHUMAN*, B. GHARIBI, and F.J. HUGHES
(King's College London, England)

0024 3:15 PM A Noninvasive Method for Phenotyping Differentiating Mesenchymal Dental Pulp Cells. C. DENNIS*, M. TOMLINSON, J. KANG, A. KALVERDA, X. YANG, and J. KIRKHAM
(University of Leeds, England)

0025 3:30 PM Characterisation of Porous Calcium Phosphate Scaffolds for Bone Tissue Engineering. P. HATTON*, R. ACKBAR, C.A. MILLER, and A. CRAWFORD
(University of Sheffield, England)

Seq#: 5 Monday, 9 September 2013, 4:00 PM - 5:30 PM
 Oral Session, Card Room (Assembly Rooms, Bath)

Scientific Groups - *Lay experience of oral health*

Chairperson: P.G. Robinson

0026 4:00 PM Mental Imagery and Dental Anxiety: An Interview Study. A. SCHNEIDER*, J. ANDRADE, K. TANJA-DIJKSTRA, and D.R. MOLES
(Plymouth University Peninsula Schools of Medicine and Dentistry, England)

0027 4:15 PM Parents' Perceived Social Norms for Brushing Young Children's Teeth. R. TRUBEY*, S. MOORE, and I. CHESTNUTT
(Cardiff University, Wales)

0028 4:30 PM Experience and Preferences from RCT of Complete Denture Impression Materials. M. GODFREY*, S. PAVITT, C. FERNANDEZ, H. CRADDOCK, G. DUKANOVIC, J. GRAY, C. HULME, P.A. BRUNTON, and T.P. HYDE
(University of Leeds, England)

0029 4:45 PM Virtual Reality Distraction During Dental Treatment: a Simulation Study. K. TANJA-DIJKSTRA*, S. PAHL, M. WHITE, J. ANDRADE, and D. MOLES
(Plymouth University, England)

0030 5:00 PM Response Shift and Dentine Hypersensitivity: a Longitudinal Qualitative Study. M. KRASUSKA*, S.R. BAKER, F. SUFI, S. MASON, A. BARLOW, and P.G. ROBINSON
(University of Sheffield, England)

0031 5:15 PM An Exploratory Study into Patients' Perceptions about Developmentally Absent Teeth. A. AKRAM*, A. IRELAND, and J. SANDY
(University of Bristol, England)

Seq#: 6 Monday, 9 September 2013, 4:00 PM - 5:15 PM

Oral Session, Tea Room (Assembly Rooms, Bath)

Scientific Groups - *Microbiology/Immunology*

Chairperson: P. Stafford

0032 4:00 PM Structure-Function Studies of *Streptococcus* Fibrillar Adhesin CshA. C.R. BACK*, P. RACE, A. NOBBS, M. CRUMP, and H.F. JENKINSON (*University of Bristol, England*)

0033 4:15 PM Advanced Therapies as Treatments of Gram-negative Infection Following Maxillofacial Surgery. E. FERGUSON*, E. AZZOPARDI, and D. THOMAS (*Cardiff University, Wales*)

0034 4:30 PM Analysis of Streptococcal Accessory Secretion System and Novel Secreted Proteins. M. JAYAWEERA BANDARA*, A. BLOCKER, I. COLLINSON, and H. JENKINSON (*University of Bristol, England*)

0036 4:45 PM A Novel Antifungal Alginate Oligomer Induces Impaired Fungal Hyphae Formation. L. POWELL, M. PRITCHARD, C. EMANUEL, S. KHAN, H. SLETTA, A. TØNDERVIK, G. KLINKENBERG, E. ONSØYEN, R. MYRVOLD, P. RYE, D. THOMAS, and K. HILL* (*Cardiff University School of Dentistry, Wales*)

0037 5:00 PM Disruption of Dental Biofilms by Matrix-degrading Enzymes. A. RMAILE*, M. ASPIRAS, M. WARD, and P. STOODLEY (*University of Southampton, England*)

Seq#: 7 Monday, 9 September 2013, 4:00 PM - 5:15 PM
Oral Session, Somerset (Hilton Hotel, Bath)

Scientific Groups - *VOCO Orals II*

Chairperson: T. Watson

0038 4:00 PM Biocompatibility Analysis of Two Clinically-Employed Resin-Based Composites. E.L. MCGINLEY*, A. O'CARROLL, and G. FLEMING
(*University of Dublin, Ireland*)

0039 4:15 PM Structural and Functional Characterisation of Dental Nanostructures. M. SANDHOLZER*, T. SUI, A. KORSUNSKY, A.D. WALMSLEY, P. LUMLEY, and G. LANDINI (*University of Birmingham, England*)

0040 4:30 PM Novel Halide Containing Bioactive Glasses for Dental Application. X. CHEN*, N. KARPUKHINA, and R. HILL (*Institute of Dentistry, Barts and The London School of Medicine and Dentistry, Queen Mary University of London, England*)

0041 4:45 PM Chemical Analysis of Recent Types of Calcium Silicate-based Cements. O. MAHMOUD*, N. AL-AFIFI, M. IBRAHIM, M. BINTI ABDULLAH, and N.H. ABU KASIM (*University of Malaysia, Kuala Lumpur, Malaysia*)

0042 5:00 PM Antimicrobial Effects of Incorporating Photocatalytic Nanoparticles into a Bonding Resin. C. CHAMBERS*, S. STEWART, B. SU, J. SANDY, and T. IRELAND (*University of Bristol, England*)

SCIENTIFIC PROGRAMME

TUESDAY 10 SEPTEMBER 2013

Seq#: 8 Tuesday, 10 September 2013, 10:30 AM - 1:00 PM
Oral Session, Tea Room (Assembly Rooms, Bath)

Scientific Groups - *Senior Colgate Awards I*

Chairperson: S. Whawell

0043 10:30 AM A Non-Invasive Method for Recording the Mandibular Tranverse Horizontal Axis. A. KEELING*, P.A. BRUNTON, and R. HOLT (*University of Leeds, England*)

0044 10:45 AM Orthodontic Dimensional Changes with Self-ligating Brackets: A Randomised Controlled Trial. P. FLEMING*, R. LEE, V. MARINHO, and A. JOHAL (*Queen Mary University of London, England*)

0045 11:00 AM Platelet Interactive Domains of *Streptococcus gordonii* surface Protein PadA. J. HAWORTH*, D. TILLEY, H. PETERSEN, A.H. NOBBS, S. KERRIGAN, and H.F. JENKINSON (*University of Bristol, England*)

0046 11:15 AM MicroRNA-196a in Head and Neck Squamous Cell Carcinoma (HNSCC). L. DARDA*, D. LAMBERT, R. MORGAN, C. MURDOCH, and K. HUNTER (*University of Sheffield, England*)

0047 11:30 AM Development of Novel Functionally Graded GTR Membrane for Periodontal Lesions. S. QASIM*, R. DELAINE-SMITH, A. RAWLINSON, and I. UR-REHMAN (*University of Sheffield, England*)

0048 11:45 AM The Use of *thy-1YFP-H* Mice in Analysing Peripheral Nerve Regeneration. A. HARDING*, C. PATEMAN, C. CHRISTMAS, F. CLAEYSSSENS, M. FERGUSON, J. HAYCOCK, A. LOESCHER, P. ROBINSON, and F. BOISSONADE (*University of Sheffield, England*)

0049 12:00 PM Leptin synergistically enhances an extracellular matrix-degrading gingival fibroblast phenotype. R. WILLIAMS*, D. ROWAN, P. PRESHAW, and J. TAYLOR (*Newcastle University, Newcastle Upon Tyne, England*)

0050 12:15 PM Clinical Implications from a RCT of Complete Denture Impression Materials. T.P. HYDE*, H. CRADDOCK, J. GRAY, S. PAVITT, J. WRIGHT, C. FERNANDEZ, C. HULME, S. BROWN, M. GODFREY, and P.A. BRUNTON (*University of Leeds, England*)

0051 12:30 PM In-vitro Evaluation of Tricalcium Silicate Cement - Adhesive Restorative Interface. D. HASHEM*, T. WATSON, and A. BANERJEE (*King's College London, England*)

0052 12:45 PM Approximal Sealing for Managing Dental Caries. M. DORRI*, S. DUNNE, D. O'SULLIVAN, and M. MOTAMEDI (*Bristol Dental School, England*)

POSTERS

Seq#: 9 Tuesday, 10 September 2013, 10:30 AM - 4:00 PM

Poster Session, Ballroom (Assembly Rooms, Bath)

Scientific Groups - *Posters*

0001 Patients' Attitudes Towards Screening For Medical Conditions in Dental Settings. S. CREANOR*, B.A. MILLWARD, A. DEMAINE, L. PRICE, W. SMITH, N. BROWN, and S. CREANOR (*Plymouth University, England*)

0053 Extraction and Characterisation of Human Dental Pulp Stem Cells. N. O'CONNOR*, V. LOPES, and P. TRAVERS (*Edinburgh Dental Institute, Scotland*)

0054 Increased Biglycan Expression Alters TGF- β_1 Bioavailability During Diabetic Bone Repair. N. YUSOP*, A.J. SLOAN, R. MOSELEY, and R. WADDINGTON (*Cardiff University, Wales*)

0055 Posterior Composite Placement and Restoration Repair amongst UK Dental Therapists. C. LYNCH*, L. EVANS, and B. CHADWICK (*Cardiff University, Wales*)

0056 Chemically Induced Growth Factor Release from Fractured Mandible Cultures. A. AL-MOUALLAD*, R. WADDINGTON, and A. SLOAN (*Cardiff University, Wales*)

0057 Osteogenic Effect of Strontium-Substituted Bioactive Glass on Mesenchymal Stromal Cells. M.E. SANTOCILDES ROMERO, P. HATTON, A. CRAWFORD, I. REANEY, and C.A. MILLER* (*University of Sheffield, England*)

0058 Oral mucosal Progenitor Cells are Resistant to Myogenic Differentiation. M. LOCKE*, L.C. DAVIES, and P. STEPHENS (*University of Wales, Cardiff, Wales*)

0059 Investigating the Antibacterial Properties of Oral Mucosal Lamina Propria-Progenitor Cells. E. BOARD-DAVIES*, A. SLOAN, P. STEPHENS, and L. DAVIES (*Cardiff University, Wales*)

- 0060** A Prototype Plasma Needle For Dentistry – *In vitro* Interactions. Z. KASSIM, J. HARLE, A. MCDONALD, and V. SALIH* (*University of Plymouth, England*)
- 0061** A Novel 3D *in vitro* Model of Human Articular Cartilage. A. HEIL*, E. BLAIN, R. WADDINGTON, C. ARCHER, and D. AESCHLIMANN (*Cardiff University, Wales*)
- 0062** BPIFA2 (SPLUNC2A) Expression in Patients Undergoing Allogenic Stem Cell Transplantation. P.A. VARGAS*, A. SILVA, M.E. CORRÊA, and L. BINGLE (*Piracicaba Dental School, University of Campinas - UNICAMP, Brazil*)
- 0063** Mesenchymal Stem Cell Interactions with Endothelial cells in Inflammation. G. CHAMBERLAIN, H. SMITH, and J. MIDDLETON* (*University of Bristol, England*)
- 0064** Effects of Pulp Capping Agents on Cell Viability and Ageing. M. REZAPOUR*, X. YANG, L. GUTTERIDGE, and W. BONASS (*University of Leeds, England*)
- 0065** Dentistry and Electronic/Mobile learning. B. KHATOON*, A.D. WALMSLEY, and K. HILL (*University of Birmingham, England*)
- 0066** The Peninsula Graduate-Entry Programme: Student Entrance Profiles from 2007-2012. S. CREANOR*, L. BUTTERWORTH, and S. CREANOR (*Plymouth University, England*)
- 0067** Foundation Dentist and Trainer Views of Trainee Confidence in Exodontia. N. HONEY*, T. GALE, and D. MOLES (*Plymouth University Peninsula Schools of Medicine & Dentistry, England*)
- 0068** Student Drinking - Stop When Things Get Fuzzy. S. SHEPHERD*, E. DUNBAR, and G.R. OGDEN (*Dundee Dental School, Scotland*)
- 0069** Determinants of Recall Intervals in Children and Young People. T. PICKLES*, N. BLEWITT, and I.G. CHESTNUTT (*Cardiff University School of Dentistry, Wales*)
- 0070** Effect of Second Mailing for Consent on Dental Survey Results. M. MORGAN* and N. MONAGHAN (*Cardiff University School of Dentistry, Wales*)

- 0071** Oral Health Research Priority setting: systematic review with interpretive analysis. M. NASSER* and H. JAVAHERI (*University of Plymouth, England*)
- 0072** Minimum Data-set for a Clinical Consultation in Restorative Dentistry. T. LONGSON*, D. ROMANO, C. STOKES, and N. MARTIN (*University of Sheffield, England*)
- 0073** The Attitude of Saudi Dental Patients Toward Removable Partial Dentures. M. ALAMMARI* (*King Abdulaziz University, Jeddah 21589, Saudi Arabia*)
- 0074** DMFT, Whole Mouth Utility Scores and Patient Reported Outcome Measures. E. KAY, C.J. TREDWIN*, P. LAMBE, I. MILLS, and M. NASSANI (*Plymouth University Peninsula Schools of Medicine and Dentistry, England*)
- 0075** Novel Denture Base Material for the Control of Oral Biofilms. S. AL-SAMMARRAIE*, S.L. ROLLAND, M. GERMAN, and N.S. JAKUBOVICS (*University of Newcastle-upon-Tyne, Newcastle upon Tyne, England*)
- 0076** Assessing Water Discharged from Dental Units Using Dip Slidestm. M. PEARCE*, H. O'DONNELL, S. SINGHRAO, and S. CREAN (*University of Central Lancashire, Preston, England*)
- 0077** Autoinducer 2 Production by Oral Bacteria. A. ADAMOWSKA*, A. LAX, and W. WADE (*King's College London, England*)
- 0078** Investigations into the Role of *Solobacterium moorei* in Oral Malodour. A. STEPHEN*, R. ALLAKER, D.J. BRADSHAW, and G. BURNETT (*Queen Mary, University of London, England*)
- 0079** Structural and Adhesive Properties of AgI/II Polypeptides in Pathogenic Streptococci. S. REGO*, H. JENKINSON, A. NOBBS, and P. RACE (*University of Bristol, England*)
- 0080** Mycology and Associated Cytokine Profiles in Denture Stomatitis. H. ROGERS*, D. WILLIAMS, X. WEI, and M. LEWIS (*School of Dentistry, Cardiff University, Wales*)

- 0081** Microbial Communities in the Dental Plaque of Mechanically Ventilated Patients. P.J. MARINO*, D.W. WILLIAMS, M.A. LEWIS, S. HAYWOOD, and M. WISE (*School of Dentistry, Cardiff University, Wales*)
- 0082** Oral TM7 Bacteria from Culture to Biofilm Formation. V. SORO , D. DYMOCK*, and H. JENKINSON (*University of Bristol, England*)
- 0083** *P.gingivalis* Heat-Shock-Protein(HtpG) Induces Pro-inflammatory Response in Monocytes and Gingival Fibroblasts. S. ZARIC*, C. SHELBURNE, M.J. LAPPIN, C. IRWIN, and W.A. COULTER (*Plymouth University, England*)
- 0084** Oral Micro-flora Facilitating Potentially Pathogenic Biofilm Development on Endotracheal Tubes. K. SANDS*, D. WILLIAMS, M. WILSON, M. LEWIS, and M. WISE (*Cardiff University, Wales*)
- 0085** Comparison of Conventional and Molecular Identification of Endodontic Isolates. M. WILSON*, D. WILLIAMS, A. BAFAIL, P. DUMMER, and M. LEWIS (*Cardiff University, Wales*)
- 0086** Triclosan Activity Against Pulpal Pathogens in an Ex-Vivo Model. J. ROBERTS*, M. NATARAJAN, L.L. MARSH, S.P. DENYER, J.-Y. MAILLARD, C. LYNCH, and A.J. SLOAN (*Cardiff University, Wales*)
- 0087** The Effect of Sialidase Inhibition on Periodontal Pathogens. A. FREY*, J. PRATTEN, C. MURDOCH, C.W.I. DOUGLAS, C. PHANSOPA, N. PATEL, A.M. MIDDLETON, and G. STAFFORD (*University of Sheffield, England*)
- 0088** Characterisation of Pulpal Response to *Streptococcus anginosus* Group Bacterial Supernatant. M. NATARAJAN*, J. ROBERTS, A. SLOAN, C. LYNCH, J.-Y. JEAN-YVES MAILLARD, and S. DENYER (*Cardiff University, Wales*)
- 0089** Role of O-mannosylation in *Candida albicans* interactions with *Streptococcus gordonii*. L. DUTTON*, A. NOBBS, S. ALAWFI, C. MUNRO, M. JEPSON, and H. JENKINSON (*University of Bristol, England*)
- 0090** Bacterial Biofilm Mineralisation Inside a Root Canal Mode. E. PECHEVA*, J.P. ROBINSON, N. NAZAM, R. SAMMONS, and A.D. WALMSLEY (*University of Birmingham, England*)

- 0091** Remineralisation Study of a Nano-sized Hydroxyapatite and Fluoride Containing Toothpaste. X. CHEN*, N. KARPUKHINA, D. GILLAM, and R. HILL (*Institute of Dentistry, Barts and the London School of Medicine and Dentistry, Queen Mary, University of London, England*)
- 0092** Culture of a Previously Uncultivated Oral Lachnospiraceae Strain. W. WADE*, H. THOMPSON, A. RYBALKA, R. MOAZZEZ, and F. DEWHIRST (*Barts and the London School of Medicine and Dentistry, England*)
- 0093** Neuropeptide Expression Corrolates with Dental Pulp Status and Thermal Sensitivity. M. BARBER*, A.R. LOESCHER, H.D. RODD, and F.M. BOISSONADE (*University of Sheffield, England*)
- 0094** Nerve Repair with Administration of TNF- α Inhibitor Reduces Glial Activation. S. ATKINS*, E. BIRD, R. POWIS, and F. BOISSONADE (*University of Sheffield, England*)
- 0095** Defining Neurochemical Properties and Functions of TG Primary Sensory Neurons. J.C. TRINER* (*University of Plymouth, England*)
- 0096** Contribution of Sodium Channel Nav1.8 to Inflammatory Pain in Man. E. BIRD*, N. SINGH, M. BARBER, H. RODD, A. LOESCHER, J. BLACK, S. WAXMAN, and F. BOISSONADE (*University of Sheffield, England*)
- 0097** TROP2 a Novel Prognostic Marker in Oral Squamous Cell Carcinoma. T. WANGER*, Z. POGHOSYAN, and V. KNAUPER (*Cardiff University Dental School, Wales*)
- 0098** Salivary Biomarkers in the Diagnosis and Pathogenesis of Immunobullous Disorders. S. ALI*, C. KELLY, S. CHALLACOMBE, and J. SETTERFIELD (*King's College London, England*)
- 0099** Gluten Related Disorders – What do TG6 Autoantibodies Tell Us? A. JEGUNDO DOS REIS*, P. AESCHLIMANN, D. SANDERS, N. HOGGARD, M. HADJIVASSILIOU, and D. AESCHLIMANN (*Cardiff University, Wales*)

0100 Novel Assay To Show Activation Of GPR56 By Tissue Transglutaminase. L. BAUER*, A. HEIL, D. AESCHLIMANN, and V. KNAUPER (*Cardiff University, Wales*)

0101 Analysis Of CD34 And CD105 Immunoexpression In Salivary Gland Tumors. F. FONSECA*, A.L. RANGEL, M. MARTINS, L. BINGLE, P.M. SPEIGHT, and P. VARGAS (*State University of Campinas, Brazil and University of Sheffield, England*)

0102 Non-surgical Periodontal Treatment: What Affects Success?. R. HOLLIDAY*, H. LAW, P. HEASMAN, and P. PRESHAW (*University of Newcastle-upon-Tyne, Newcastle Upon Tyne, England*)

0103 Safety and Efficacy on Plaque Removal of Tapered Filament Toothbrushes. V. KERDVONGBUNDIT*, T. KAOSAL, P. TEEKAARIYAPARK, V. OEUR, and Y. KUPHASUK (*Mahidol University, Bangkok, Thailand*)

0104 SEM Analysis of Contemporary Design Toothbrush Filament Ends. T. KAOSAL, P. TEEKAARIYAPARK*, C. TEANCHAI, Y. KUPHASUK, V. KERDVONGBUNDIT, and V. OEUR (*Mahidol University, Bangkok, Thailand*)

0105 Mechano-responsive Genes in the Periodontal Ligament. A. ALHODHODI*, W. EL-HOSSARY, I. SHAH, E.M. RAIF, R.C. SHORE, and W.A. BONASS (*University of Leeds, England*)

0106 Reference Gene Selection in Human Periodontal Ligament Cells. H. ABDULLAH, M.T.C. MC CRUDDEN, I. EL KARIM, M.S. GHUMAN, G. LINDEN, C. IRWIN, and F. LUNDY* (*Queen's University of Belfast, Northern Ireland*)

0107 Phosphoproteomic Changes in Response to Live Periodontal Pathogens. P. STAFFORD, K. PHAM, P. WRIGHT, C.W.I. DOUGLAS, G. STAFFORD, and D. LAMBERT* (*University of Sheffield, England*)

0108 *IN-VITRO* Toothbrushing Wear and Coating Effect on New Tricalcium-Silicate Cement. N.A. SAMSUDIN*, P. PILECKI, A. MANOHARAN, M.T. HOSEY, and T. WATSON (*King's College London, England*)

0109 Effect Of Acetone On Novel Fluoride Releasing Acrylic Orthodontic Adhesives. H. ISMAIL*, S.L. ROLLAND, and M. GERMAN (*University of Newcastle-upon-Tyne, England*)

0110 The Sintering Effect on Fluoroapatite coatings towards Dental Implant Applications. A. AL-HILOU*, D.J. WOOD, M. KATSIKOIANNI, T. DO, B.H. CLARKSON, S.R. CHANG, J. LIU, and A. CZAJKA-JAKUBOWSKA (*University of Leeds, England*)

0111 Evaluation of Remineralizing Potential of Biodentine™ Using Two-photon Fluorescence Microscopy. S. SAJINI*, A. ATMEH, F. FESTY, and T. WATSON (*King's College London, England*)

0112 Matrix Stabilization Following Tissue Injury: Is P2X7R Activation the Link?. M. ADAMCZYK*, S. DEWITT, V. KNÄUPER, and D. AESCHLIMANN (*Cardiff University, Wales*)

0113 Effect of Dietary, Gastric, Bacterial and Experimental Acids on Dentine. E. ASHWORTH*, C.A. MILLER, C. DEERY, and N. MARTIN (*University of Sheffield, England*)

0114 Using OCT to Investigate Topographical Changes of Enamel During Erosion. A. ADEN*, G. BURNETT, and P. TOMLINS (*Queen Mary University of London, England*)

0115 Effect of Fluoride on Orthodontically-Induced Root Resorption *In Vitro* . T. FAHEY*, P. STEPHENSON, A.J. SLOAN, and R.J. WADDINGTON (*University of Wales, Cardiff, Wales*)

0182 Cell Cycle Protein Expression in Oral Cancer and Metastases. I. ZARGOUN* (*University of Sheffield, England*)

Seq#: 10 Tuesday, 10 September 2013, 11:00 AM - 12:30 PM

Oral Session, Somerset (Hilton Hotel, Bath)

Scientific Groups - *Periodontal Research*

Chairperson: M. Soory

0116 11:00 AM Modulation of CRP and Oxidized LDL by Minocycline in Osteoblasts. A. TILAKARATNE and M. SOORY* (*King`s College London Dental Institute, England*)

0117 11:15 AM Salivary HMW Adiponectin is a Novel Biomarker for Periodontal disease. K. JAEDICKE*, J. TAYLOR, and P. PRESHAW (*Newcastle University, Newcastle upon Tyne, England*)

0118 11:30 AM Peripheral Blood Neutrophil Extracellular Trap Release in Chronic Periodontitis Patients. P. HARRIS*, M. LING, M. MILWARD, P. COOPER, and I. CHAPPLE (*University of Birmingham Dental Hospital, England*)

0119 11:45 AM A Novel Tooth *in situ* Organ Culture for Periodontal Research. R. EL-GENDY*, S. LAM, S. JUNAID, K. ELSON, J. TIPPER, E. INGHAM, R. HALL, and J. KIRKHAM (*University of Leeds, England*)

0120 12:00 PM Neutrophils from Periodontitis Patients Exhibit Defective Chemotaxis. H. ROBERTS*, M. GRANT, M. LING, and I. CHAPPLE (*University of Birmingham, England*)

0121 12:15 PM Periodontopathogen-Specific Alteration of microRNAs in Oral Epithelial Cells. P. STAFFORD*, C.W.I. DOUGLAS, G. STAFFORD, and D. LAMBERT (*University of Sheffield, England*)

Seq#: 11 Tuesday, 10 September 2013, 11:00 AM – 12:45 PM
 Oral Session, Card Room (Assembly Rooms, Bath)

Scientific Groups - *Junior Colgates*

0122 11:00 AM Food References in UK Children's Magazines: an Oral Health Perspective. K. CHAPMAN* and M. MORGAN (*Cardiff University School of Dentistry, Wales*)

0123 11:15 AM Reconstructing Source and History of Lead Exposure in Deciduous Teeth. J. PATEL* (*University of Newcastle-upon-Tyne, Newcastle upon Tyne, England*)

0124 11:30 AM Stability of Salivary Antimicrobial Peptide Samples as Periodontal Diagnostic Biomarkers. J. TEBBUTT*, B. KARIM, B. GHARIBI, and F.J. HUGHES (*King's College, London, England*)

0125 11:45 AM Role of HOPX in Head and Neck Squamous Cell Carcinoma. J. WHITE*, D. LAMBERT, and K. HUNTER (*University of Sheffield, England*)

0126 12:00 PM Effects of Sprouty2 on Osteogenic Differentiation of Mesenchymal Stem Cells. A. SCHNEIDER*, F.J. HUGHES, and B. GHARIBI (*King's College London, England*)

0127 12:15 PM A Novel Strontium Bioactive Glass for Treating Dentine Hypersensitivity. E. PATHMANANTHAN* (*St. Bartholomew's & The Royal London, England*)

0128 12:30 PM Zinc and Fluoride Containing Bioactive Glasses in Desensitizing Toothpastes. P. SHAH*, N. KARPUKHINA, M. MNEIMNE, R. HILL, and D.G. GILLAM (*Dental Institute, Barts and The London School of Medicine and Dentistry, Queen Mary University of London, England*)

Seq#: 12 Tuesday, 10 September 2013, 1:45 PM - 4:00 PM

Oral Session, Tea Room (Assembly Rooms, Bath)

Scientific Groups - Senior Colgate Awards II

Chairperson: S. Whawell

0129 1:45 PM A Role for the Renin-Angiotensin System in Oral Cancer. E.E. HINSLEY*, G.E. MELLING, S. HUNT, and D. LAMBERT (*University of Sheffield, England*)

0130 2:00 PM Aligned Polymer Scaffolds in Periodontal Tissue Engineering. D. ALOTAIBI*, E. JONES, K. LEGERLOTZ, G. RILEY, G. GRIFFITHS, P.V. HATTON, and A. CRAWFORD (*The University of Sheffield, England*)

0131 2:15 PM Approaches to and Challenges in Hard Tooth Tissue Regeneration. N. BESSUDNOVA* (*Saratov State University, Russia*)

0132 2:30 PM Determinants of Oral Health Related Quality of Life in Adults. E. GUPTA*, S.R. BAKER, C.M. MARYA, and P.G. ROBINSON (*University of Sheffield, England*)

0133 2:45 PM Investigating Effects of Zinc on Surface Enamel Demineralization using uleSIMS. N.R. MOHAMMED*, R.J.M. LYNCH, and P. ANDERSON (*Dental Physical Sciences, London, England*)

0134 3:00 PM Micromanaging Fibroblast Senescence: Role of Small Non-coding RNA in SASP. T.D. KABIR*, P.M. SPEIGHT, and D.W. LAMBERT (*University of Sheffield, England*)

0135 3:15 PM Mimicking Natural Bone Development to Produce Tissue for Bone Grafts. K. BARDSLEY*, P. HATTON, I. BROOK, and A. CRAWFORD (*University of Sheffield, England*)

0136 3:30 PM Modelling and Physical Characterisation of Alginate Oligomer-Mucin Interactions. M. PRITCHARD*, P. LEWIS, K. HAWKINS, L. POWELL, G. MENZIES, K. HILL, I. DOULL, E. ONSØYEN, and D. THOMAS (*Cardiff University School of Dentistry, Wales*)

0137 3:45 PM X-Ray Microtomographic Quantification of Obturation Quality in Root Canal Treatment. I. GHARIB*, F.S.L. WONG, and G.R. DAVIS (*Queen Mary University of London, England*)

Seq#: 13 Tuesday, 10 September 2013, 2:00 PM - 3:30 PM

Oral Session, Somerset (Hilton Hotel, Bath)

Scientific Groups - *Glasses*

Chairperson: P. Hatton

0138 2:00 PM An X-ray Microtomography Study Of ART Restorations. G. DAVIS, R. HILL*, and A.F. AL-SHAMMAA (*Institute of Dentistry, Barts and The London, Queen Mary, University of London, England*)

0139 2:15 PM In-vitro Remineralisation of Glass Ionomer Cements. R. ALBESHTI*, N. KARPUKHINA, and A. BUSHBY (*Institute of Dentistry, Barts and The London School of Medicine and Dentistry, Queen Mary University of London, London, England*)

0140 2:30 PM Enamel Remineralisation Using Bio-active glass Powder. H. MILLY*, I. THOMPSON, and A. BANERJEE (*King's College, London, England*)

0141 2:45 PM Optical Properties of Restorative Glass-ionomer Cements. R. BILLINGTON* and S. SHAHID (*Barts and the London School of Medicine and Dentistry, England*)

0142 3:00 PM Measurement of Radiopacity of Modern Commercial Glass Ionomer Cements. S. SHAHID* and R. BILLINGTON (*Barts and the London School of Medicine and Dentistry, England*)

0143 3:15 PM Water Uptake and Solubility of Resin-Modified Glass Ionomer Cement (RMGIC). A. AGHA*, S. PARKER, and M.P. PATEL (*Queen Mary University of London, England*)

SCIENTIFIC PROGRAMME

WEDNESDAY 11 SEPTEMBER 2013

Seq#: 14 Wednesday, 11 September 2013, 9:00 AM - 10:30 AM
Oral Session, Somerset (Hilton Hotel, Bath)

Scientific Groups - *Dentine, Enamel and Pulp*

Chairperson: P. Anderson

0144 9:00 AM Tracing Hyper-mineralisation in Dentine Using High Contrast X-ray Microtomography. G. DAVIS* (*Queen Mary University of London, England*)

0145 9:15 AM In Vitro Study on Cariostatic Effect of Poly (L-glutamic acid). N. JOSEPH*, R. WILLIAMS, M. AL-JAWAD, and P. ANDERSON (*Queen Mary University of London, England*)

0146 9:30 AM Surface Roughness Measurements of Enamel During De- and Subsequent Re-mineralization. D. ABDULHAMED, M. AL-JAWAD, and P. ANDERSON* (*Queen Mary University of London, England*)

0147 9:45 AM The Effect of Three Sterilisation Methods on Hypomineralised Enamel hardness. A. ABDULLAH*, A. IRELAND, J. SANDY, and M. BARBOUR (*University of Bristol, England*)

0148 10:00 AM TNF- α Sensitizes Mechanoreceptors in Human Odontoblasts. I. EL KARIM*, M. MCCRUDDEN, T. CURTIS, G. LINDEN, C. IRWIN, and F. LUNDY (*Queen's University Belfast, Northern Ireland*)

0185 10:15 AM Toothwear and differences in Calcium and Phosphate Concentrations in Saliva. M.A. HARDING*, H. WHELTON, D. COCKER, and N. CURRAN (*University College Cork, Cork, Ireland*)

Seq#: 15 Wednesday, 11 September 2013, 9:00 AM - 10:15 AM
Oral Session, Gloucester (Hilton Hotel, Bath)

Scientific Groups - *Dentistry*

Chairperson: N. Martin

0149 9:00 AM A Novel Technique For Characterising The Interface Geometry of Crowns. R.S. AL MARZA*, S. SHAHARBAF, and N. MARTIN (*University of Sheffield, England*)

0150 9:15 AM Effect of Preparation Design of Tooth-crown-complex: FEA and Mechanical Testing. S. SHAHRBAF*, R. VAN NOORT, B. MIRZAKOUCHAKI, E. GHASSEMIEH, and N. MARTIN (*University of Sheffield, England*)

0151 9:30 AM How Good are we at Orthodontic Space Analysis. C. WALLIS* (*University of Bristol, England*)

0152 9:45 AM Cost-Effectiveness of Silicone Compared to Alginate for Impressions for Dentures. C. HULME*, S. PAVITT, H. CRADDOCK, J. GRAY, P.A. BRUNTON, C. FERNANDEZ, M. GODFREY, and T.P. HYDE (*University of Leeds, England*)

0153 10:00 AM Student Perceptions of Professionalism in the Undergraduate Curriculum. A. RANAUTA*, E.S. DAVENPORT, and V. COOK (*Institute of Dentistry, London, England*)

Seq#: 16 Wednesday, 11 September 2013, 9:00 AM - 10:15 AM
Oral Session, Card Room (Assembly Rooms, Bath)

Scientific Groups - *General Dental Practice*

Chairperson: S. Lucarotti

0154 9:00 AM Reasons for the Extraction of Teeth in one Dental Practice. P. FROST* and R. OLLEY (*King's College London, England*)

0155 9:15 AM Patient-Centered Care in General Dental Practice – a Systematic Review. I. MILLS*, J. FROST, C. COOPER, D. MOLES, and E.J. KAY (*Plymouth University Peninsula Schools of Medicine and Dentistry, England*)

0156 9:30 AM What Happened Next? The Definitive General Dental Services Evidence Base. S. LUCAROTTI* and F.J.T. BURKE (*University of Birmingham, England*)

0157 9:45 AM Furthering Understanding of General Dental Practitioners' Application of Fluoride Varnish. W. GNICH, D. BONETTI, A. SHERRIFF*, S. SHARMA, D.I. CONWAY, and L.M. MACPHERSON (*University of Glasgow, Scotland*)

0158 10:00 AM Therapeutic Antibiotic Prescribing by General Dental Practitioners. A. COPE*, N. FRANCIS, F. WOOD, and I.G. CHESTNUTT (*Cardiff University, Wales*)

Seq#: 17 Wednesday, 11 September 2013, 11:00 AM - 12:30 PM

Oral Session, Card Room (Assembly Rooms, Bath)

Scientific Groups - *Behavioral, Epidemiologic and Health Services Research*

Chairperson: D. Conway

0160 11:00 AM The Cleft Collective Cohort Studies. K. HUMPHRIES*, B. ST.POURCAIN, N. STOCK, M. PERSSON, N. RUMSEY, and J. SANDY (*University of Bristol, England*)

0161 11:15 AM Cleft Care UK - National Cleft Lip and Palate Outcomes. J. SANDY*, M. PERSSON, A. IRELAND, and A. NESS (*University of Bristol, England*)

0162 11:30 AM Adherence among Orthodontic Patients A systematic review. A. ALJABAA*, T. NEWTON, and F. MCDONALD (*King's College London, England*)

0163 11:45 AM Area and Individual Socioeconomic Factors and Cancer Risk Cohort Study. K. SHARPE*, A. MCMAHON, G. RAAB, D. CONWAY, and D. BREWSTER (*National Services Scotland, Edinburgh, Scotland*)

0164 12:00 PM Estimating and Explaining Socioeconomic Risk of Head and Neck Cancer. D.I. CONWAY*, D. BRENNER, A.D. MCMAHON, L.M. MACPHERSON, and INHANCE CONSORTIUM (*University of Glasgow, Scotland*)

0165 12:15 PM Growth Characteristics in Children with Unilateral Cleft Lip and Palate. R. POWER*, B. ST POURCAIN, A. MALIK, A. IRELAND, M. PERSSON, J. SANDY, and A. NESS (*University of Bristol, England*)

Seq#: 18 Wednesday, 11 September 2013, 11:00 AM - 12:00 PM
Oral Session, Somerset (Hilton Hotel, Bath)

Scientific Groups - *Dental Materials*

Chairperson: R. Hill

0167 11:00 AM Salivary Pellicle Structural Changes after Exposure to SDS and STP. A. ASH*, G. BURNETT, and P.J. WILDE (*Institute of Food Research, Norwich, England*)

0168 11:15 AM Biomimetic Hydroxyapatite Nanophases For Biomedical Applications. P. GENTILE*, C. WILCOCK, Y. RYABENKOVA, R. MOOREHEAD, C. MILLER, and P. HATTON (*University of Sheffield, England*)

0169 11:30 AM Enhancing Implant Osseointegration via Micro/Nanotopographies. T. SJOSTROM, B. SU*, L. McNAMARA, and M. DALBY (*University of Bristol, England*)

0170 11:45 PM Fabrication and Characterisation of Anisotropic Ceramic/Polymer Composite for Orthodontic Brackets. S. STEWART*, C. CHAMBERS, A. IRELAND, J. SANDY, and B. SU (*University of Bristol, England*)

Seq#: 19 Wednesday, 11 September 2013, 11:00 AM - 12:30 PM

Oral Session, Ballroom (Assembly Rooms, Bath)

Scientific Groups - *Periodontal pathogenesis*

Chairperson: G. Stafford

0171 11:00 AM Serum Cytokines and Adipokines in Periodontitis. G. LINDEN*, C.A. MCFALL, F. KEE, and F. LUNDY (*Queen's University of Belfast, Northern Ireland*)

0172 11:15 AM *P.gingivalis* Induces IL-17 Production in CD4+ T-cell/Monocyte Co-cultures *in vitro*. W.-C. CHENG*, H.G. EVANS, G.J. WALTER, L. TAAMS, and F.J. HUGHES (*King's College London, England*)

0173 11:30 AM Characterisation of Sialic Acid Binding by the Periodontopathogen *Tannerella forsythia*. C. PHANSOPA*, J. RAFFERTY, D. KELLY, C.W. DOUGLAS, and G. STAFFORD (*Integrated Bioscience, Sheffield, England*)

0174 11:45 AM Molecular Mechanisms of Human Cell Interactions of *P. gingivalis*. K. NAYLOR*, M. CONNOLLY, P. STAFFORD, C.W. DOUGLAS, C. MURDOCH, and G. STAFFORD (*University of Sheffield, England*)

0175 12:00 PM Endothelin-1 Identifies a Subpopulation of Epithelial Cells Associated with *P. gingivalis*. S. WHAWELL*, A. PINNOCK, D.W. LAMBERT, and I. DOUGLAS (*Sheffield University, England*)

0176 12:15 PM Dysbiosis of the Oral Microbiota: Host Gene and Pathogen Effects. M. CURTIS*, A. HASHIM, M. PAYNE, and J. ADUSE-OPOKU (*Barts and The London School of Medicine and Dentistry QMUL, England*)

Seq#: 20 Wednesday, 11 September 2013, 11:00 AM – 12:45 PM

Oral Session, Tea Room (Assembly Rooms, Bath)

Scientific Groups - *Oral Medicine and Pathology*

Chairperson: J. Middleton

0177 11:00 AM MicroRNA-145 Inhibits Oral Myofibroblast Transdifferentiation. G. MELLING*, E.E. HINSLEY, J.W. CATTO, and D.W. LAMBERT (*University of Sheffield, England*)

0178 11:15 AM Histopathological Differences Between Non-specific and nicorandil-induced Oral Ulcers. D. BRIERLEY*, S. KHURRAM, D.W. LAMBERT, and K. HUNTER (*University of Sheffield, England*)

0166 11:30 AM Expression Patterns of TLR Complex Components Within Trigeminal Sensory Neurons. M. HELLEY*, S. JACKSON, J. BENNETT, and S.W. THOMPSON (*Plymouth University Peninsula Schools of Medicine & Dentistry, England*)

0180 11:45 AM Chemokine-Stimulated Endothelial Microstructures and their Role in Inflammation. C. WHITTALL, S. KING, O. KEHOE, and J. MIDDLETON* (*University of Bristol, England*)

0181 12:00 PM Primary Cilia and Craniofacial Defects. S. GHAFOR*, A. OHAZAMA, B. FRANCO, and P. SHARPE (*King's College London, England*)

0183 12:15 PM LPS and Cancer Cell Supernatants Modulate Macrophage Inflammatory Cytokine Responses. L. BELFIELD*, J. BENNETT, and S.K. JACKSON (*Plymouth University Peninsula Schools of Medicine and Dentistry*)

0184 12:30 PM $\beta 6$ integrin is upregulated by TGF β activated fibroblasts in OSCC. S. WHAWELL*, A.A. AHMAD, and D.W. LAMBERT (*Sheffield University, England*)

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