

BIOGRAPHICAL CV: Peter Anthony MOSSEY, BDS, PhD, FDS, MOrth RCSEd, FFD RCSI, FDS RCPS, FHEA, FRSE

NAME: **Peter Anthony MOSSEY**: Email p.a.mossey@dundee.ac.uk: Tel: 0044 1382 381643

TITLE: Professor of Craniofacial Development and Dentofacial Orthopaedics. Honorary Consultant in Orthodontics. Associate Dean for Internationalisation.

Position, roles and profile: Professor of Craniofacial Development and Consultant in Orthodontics, University of Dundee Dental School. Currently Associate Dean for Internationalisation, University of Dundee Dental School and on the Executive Committee of IADR Global Oral Health Inequalities Research Network (GOHIRN) as immediate Past President. Prolific publisher in specialist field with 225 publications overall and 57 peer reviewed publications in the last 5 years, a H-index = 38.60 (ReserchGate, August 2021) and in the same period supervised 12 PhD students and 10 Research Masters projects to successful completion.

Current Responsibilities: includes...

1. Professor of Craniofacial Development and Consultant in Orthodontics
2. Associate Dean for Internationalisation, Dundee University Dental School
3. Immediate Past President IADR Global Oral Health Inequalities Research Network
4. Advisor to WHO in matters related to oral health and craniofacial developmental defects
5. Chair of International Dental Federation (FDI) Oral Health in Comprehensive Cleft Care
6. Chair the Global Task Force for CLP on "Epidemiology, Aetiology and Prevention".
7. Member of the Medical Advisory Board (Executive Committee) of Smile Train
8. Associate Editor for Genetics in the Journal "Oral & Maxillofacial Surgery"

Contributions to craniofacial anomalies and cleft lip and palate research:

After two decades of research in the field I have made contributions to the understanding of craniofacial birth defects, and to oral health and disease, with a major emphasis on gene-environment interaction and epigenetic aspects of these conditions. In 1998, was co-applicant on a **\$2.5M NIDCR grant** which aimed to achieve global consensus on the research agenda for Craniofacial conditions including Clefts. I was nominated in March 2000 by WHO as one of four experts in the world for the purposes of co-ordinating global research in craniofacial birth defects.

In August 2004 the Unit of Dental and Oral Health at the University of Dundee was designated a "**WHO Collaborating Centre for Public Health Issues on Congenital Anomalies and Technology Transfer**" in recognition of the research work on cleft lip and palate and other craniofacial anomalies. WHO collaborative status was renewed in 2008 and 2012 and in 2014 was re-designated with an expanded remit for all aspects of oral health and NCDs. The role of the WHO Collaborating Centre in Dundee has been through the WHO Terms of Reference (ToR) access Health Ministries in LMIC member states such as Nigeria, Ethiopia, Malawi, Indonesia and India (Tamil Nadu) to strategise towards achievement of Universal Health Coverage (UHC) in their care of those born with craniofacial conditions; and to aim to establish **surveillance systems, investigate risk factors, both genetic and environmental** and help achieve the ultimate scientific and humanitarian objective for developmental conditions which is primary prevention.

In May 2010 was appointed Leader for the Craniofacial Anomalies theme of the **WHO Global Burden of Disease (GBD) Birth Defects** initiative arising from the recommendations of the 63rd World Health Assembly. In Arlington in 2011 chaired the **Craniofacial Anomalies Group** of the IADR Global Oral Health Inequalities Research Agenda (GOHIRN) and was appointed **Secretary of the IADR GOHIRN** in 2012. In June 2013 was appointed Chair of the Global Task Force on epidemiology, aetiology and prevention of cleft lip and palate in an ongoing drive to achieve.

Contributions to IADR in the global oral health arena:

In 2011, I became involved in the IADR GOHIRN initiative and adopted a leadership role, becoming Secretary in 2012. At the first European PER meeting following the formation of the GOHIRN the future strategy and research agenda were discussed and from this the Budapest Declaration emerged – which was published in 2014: In summary I have undertaken responsibility for leading on the following major themes:

1. **Integration of oral and general health:** Emphasis on the role of oral health in general health, particularly in relation to the role of diet, free sugars, common risk factors and social determinants, and those who stand to gain most are those who are most disadvantaged in the social gradient.
2. **Advocacy for issues related to health inequalities:** In both oral health and in my area of specialist interest, craniofacial anomalies, I have championed the initiative to identify inequalities and to engage with both upstream and downstream stakeholders to address this issue. I have worked with NGOs and with funders of inequalities research to ensure that the global bodies responsible for delivery of dental and oral health are acting synergistically, with translational action being pursued via a range of initiatives.
3. **Health Economics in oral health:** as we consider the advocacy approach and influencing the political landscape, one way of gaining traction needed in the developing world is to be able to demonstrate that prevention is indeed better than cure, and that it is cost effective. Co-authored a publication entitled “Global Economic Impact of Dental Diseases” (see Listl et al, 2015 below) that underpins the commercial determinants of health and helps inform the SDG agenda on Universal Health Coverage (UHC) and the WHO “best buys” agenda.
4. **Global partnership and knowledge exchange agenda** – undertook to promote the synergies between IADR, WHO and FDI by establishing interests in and working closely with all 3 areas of oral health, identifying synergies and working towards effective collaborations. While chairing IADR Science Information Committee (SIC), brought aspects of WHO and FDI interests into IADR policies and also worked in partnership with AADR, thus achieving consensus in policy. Was an advocate for strong links with the NCD Alliance and was instrumental in dialogue with Srinath Reddy, Katie Dain and Nina Renshaw to bring oral health into the NCDA.

The IADR GOHIRN Dental Wikipedia and the health inequalities research agenda

In Budapest IADR_GOHIRN identified that there are problems / opportunities with Dental Wikipedia and with colleagues in the Cochrane Oral Health collaboration we have appointed a Dental Wikipedia facilitator at the University of Dundee, set up a collaborative programme, and there is now an opportunity to roll out nationally and internationally an expert facilitated student programme.

Publication Highlights (career top 20 peer reviewed publications)

1. **Mossey PA**, Little J, Munger RG, Dixon MJ, Shaw WC (2009): Cleft Lip and palate. *The Lancet* 09/2009; 374 (9703).
2. Stefanie Birnbaum, Kerstin U Ludwig, Heiko Reutter, [and others] ... **Mossey PA** et al., (2009) Key susceptibility locus for nonsyndromic cleft lip with or without cleft palate on chromosome 8q24. *Nature Genetics* 05/2009; 41(4).
3. Elisabeth Mangold, Kerstin U Ludwig, Stefanie Birnbaum, [and others] **Mossey PA** et al (2009) Genome-wide association study identifies two susceptibility loci for nonsyndromic cleft lip with or without cleft palate. *Nature Genetics* 12/2009; 42(1).
4. Kerstin U Ludwig, Elisabeth Mangold, Stefan Herms, [and others] ... **Mossey PA** et al (2012): Genome-wide meta-analyses of nonsyndromic cleft lip with or without cleft palate identify six new risk loci. *Nature Genetics* 08/2012; 44(9).
5. Modell B, Berry RJ, Boyle CA, Christianson A, Darlison M, Dolk H, Howson CP....**Mossey PA** et al.,. (2012) Global regional and national causes of child mortality. *The Lancet*
6. Butali A, **Mossey PA**, Adeyemo WL, Murray JC. (2012). Genetic Studies in the Nigerian Population Implicate an MSX1 Mutation in Complex Oral Facial Clefting Disorders. *The Cleft Palate-Craniofacial Journal* ;
7. Butali A, Little J, Chevrier C ... [and others]... **Mossey PA** (2013). Folic Acid Supplementation Use and the MTHFR C677T Polymorphism in Orofacial Clefts Etiology: An Individual Participant Data Pooled-Analysis. *Birth Defects Research Part A Clinical and Molecular Teratology* 08/2013; 97(8).
8. Sabbagh HJ, Hassan MHA... [and others]... **Mossey PA** (2014): Parental Consanguinity and Nonsyndromic Orofacial Clefts in Children: A Systematic Review and Meta-Analyses. *The Cleft Palate-Craniofacial Journal* 09/2014; 51(5).
9. **Mossey PA**, Petersen PE. Budapest Declaration: IADR-GOHIRA® *Journal of Dental Research* 2014; 93(7): 1205-06
10. Butali, A, **Mossey PA**, Tiffin N, Adeyemo W, Eshete M, Chrispinanus M, et al. Multidisciplinary approach to genomics research in Africa: The AfriCRAN model. *Pan African Medical Journal* 2015;
11. Listl S, Galloway J, **Mossey PA**, Marcenes W. (2015). Global Economic Impact of Dental Diseases. *Journal of Dental Research*; 94(10): 1355–1361

12. Leslie EJ, Carlson JC, Shaffer JR, [and others].... **Mossey PA.** et al (2016) A multi-ethnic genome- wide association study identifies novel loci for nonsyndromic cleft lip with or without cleft palate on 2p24.2, 17q23 and 19q31. Human Molecular Genetics. 30; 104-114.
13. Kadir A, **Mossey PA,** Blencowe H, Moorthie S, Lawn JE et al. (2017) Systematic review and meta-analysis of the birth prevalence of orofacial clefts in low and middle-income countries. The Cleft Palate-Craniofacial Journal. 54(5):571-581
14. Moorthie S, Blencowe H, Darlison M, Lawn JE, Mastroiacovo P, Morris JK, **Mossey PA,** Modell B & CONGENITAL DISORDERS EXPERT GROUP (2017), 'An overview of concepts and approaches used in estimating the burden of congenital disorders globally' Journal of Community Genetics, 23; 22-30.
15. **Mossey P.A.,** Little J, Steegers-Theunissen RP, Molloy AM, Peterlin B, Shaw WC, Johnson C, Fitzpatrick DR, Franceschelli P & Rubini M 2017, 'Genetic interactions in nonsyndromic orofacial clefts in Europe - EUROCRAN study' Cleft Palate-Craniofacial Journal, 54 (6), 623-630.
16. Blencowe H, Moorthie S, Darlison MW, Gibbons, S, **Mossey, PA** & Modell, B & CONGENITAL DISORDERS EXPERT GROUP, (2018), 'Methods to estimate access to care and the effect of interventions on the outcomes of congenital disorders' Journal of Community Genetics, 24; 1-14.
17. Pinheiro, M., Ma, X., Fagan, M. J., McIntyre, G. T., Lin, P., Sivamurthy, G. & **Mossey, P. A.,** (2019). A 3D cephalometric protocol for the accurate quantification of the craniofacial symmetry and facial growth. Journal of Biological Engineering. 13, 1-11.
18. Butali A, **Mossey PA,** Adeyemo WL, Eshete MA, et al., (2019). Genomic analyses in African populations identify novel risk loci for cleft palate. Human Molecular Genetics. 28, 6, p. 1038-1051.
19. Jafar Sabbagh H, Innes N,other authors ... **Mossey, PA.** (2019). Molecular Screening of VAX1 Gene Polymorphisms Uncovered the Genetic Heterogeneity of Non-Syndromic Orofacial Cleft in Saudi Arabian Patients. Genetic Testing and Molecular Biomarkers. 23, 1, 45-50.
20. Alade AA, Buxo-Martinez CJ, **Mossey PA,** Gowans LJJ et al, (2020). Non-random distribution of deleterious mutations in the DNA and protein-binding domains of IRF6 are associated with Van Der Woude syndrome. Molecular Genetics and Genomic Medicine, 8 (8); 1355-65

NOTE: Publications above selected on the basis of impact, citations and predominantly on Mossey PA as first or last (senior) author.

Current Leadership Roles in Oral Health

Leadership roles in recent years in the Oral Health arena include Presidency of the **IADR Global Oral Health Inequalities Research Network**, having been Secretary and Vice President in the lead up to the GOHIRN Presidency. As President, introduced a range of initiatives to reinvigorate, revise communication strategy, establish new ways of improving visibility and advocacy and optimise the influence in a range of important global oral health inequalities issues.

Served as chair of the **IADR Scientific Information Committee** (SIC) from 2017 – 2020, developed position papers and policy documents on the role of Oral Health in the Minamata Convention on phase down of dental amalgam and on free sugars / sugar sweetened beverages (SSB) and oral health, both of which have been adopted by the Board/Council of IADR as policy statements.

Contributed to the **FDI Vision 2030** meetings and deliberations that lead to a publication in January 2021 of the **“Delivering Optimal Oral Health for All”** document and was appointed by FDI to Chair a committee on development of new guidelines for Orofacial Clefts – the **FDI “Oral Health in Comprehensive Cleft Care”** in an initiative jointly supported by Smile Train and GSK.

Served as Director of a **World Health Organisation (WHO)** Collaborating Centre on Craniofacial conditions from 2004 to 2018 and made a contribution to a range of initiatives to enhance oral cleft care and prevention culminating in contributions to the **WHO EB 148** in Jan 2021, the **WHA74** resolution on Oral Health and the **WHO Oral Health Report** due to be published later in 2021.

Invited to join the **Medical Advisory Board of Smile Train**, the largest Cleft Charity in the world in July 2019; to assist Smile Train with capacity building for cleft care in the developing world and to assist with the transition to being a research funding body underpinned by a research and innovations committee.

Recent Honors

- 2015 (March): **Arnold Huddart Medal** – Craniofacial Society of Great Britain & Ireland conference paper Chalmers EV, McIntyre GT, Mossey PA. “Comparison of intra-oral scanning and impressions for outcome assessment in CL(P)”
- 2015 (July): **Mulick Orthodontic Scholarship** – American Cleft Palate-Craniofacial Association – awarded to my Masters student Catherine Martin to attend the 2015 American Cleft Palate Association 72nd Annual Meeting in Palm Springs, California
- 2021 (March): Selection to be admitted to a prestigious academic society, the **Royal Society of Edinburgh** (FRSE) which recognizes career contribution to science.
- 2021 (April): Notification from **Expertscape** in April 2021 that due to the contributions to the scientific literature emerged as a global expert in the field of cleft lip and palate.
<https://www.expertscape.com/au/cleft+palate/Mossey%2C+P>

Research grant funding: Lifetime total = £12.6 MILLION and includes grants from the Medical Research Council (MRC), The Wellcome Trust, Sport Aiding Medical Research for Kids (SPARKS), British Orthodontic Science Foundation (BOSF), EU Framework 5 (EUROCRAN), European Science Foundation (ESF-EMRC), European Co-operation in Science and Technology (COST) and US National Institutes of Health (NIH / NIDCR).

Grants Awarded—Selected projects (PI or Co-applicant) and ongoing research beneath table

Grant awards	Value	Dates
European Co-operation in Science and Technology (COST): European Cleft lip and palate application: COST CA16234 – TITLE: “European cleft and craniofacial initiative for equality in care”. January 2017: Network grant funding up to over 5 years.	€2.5 million	01/10/17 – 30/09/22
NIH Multicentre collaborative RCT on timing of CP Surgery (TOPS) * (NIDCR, US funding)	\$5.6 million*	01/10/08 – 30/11/19 *
Wellcome Trust seed funding – collaboration with University of Hull. TITLE: “Three Dimensional Analysis of Maxillofacial Growth in Patients with Cleft Lip and Palate”.	£96,401	01/10/19 – 30/12/20
ESF Network on Cleft Lip and Palate Research “EUROcleftNet” (EU Framework funding)	€421,810	01/07/14 – 30/06/18
UKIERI (UK-India Education and Research Initiative) TRIP – tri-partite partnership grant (UK-US-India)	£80,000	01/04/13 – 31/03/15
Nutrition and Oral Clefts In Asia: Planning Grant: NIDCR (NIH) International Oral Health Research Planning Grant Program	\$ 265,446	01/09/11 - 31/08/14

Current Research grant funding update:

- British Orthodontic Science Foundation (BOSF):** “Fixed Versus Conventional Removable Twinblock For Overjet Reduction In Children - A Randomised Controlled Trial To Investigate The Speed of overjet reduction”. **£99,083**. 01/3/19 – 31/05/23
- Wellcome Trust seed funding** – collaboration with University of Hull. TITLE: “Three Dimensional Analysis of Maxillofacial Growth in Patients with Cleft Lip and Palate”. **£96,401**. 01/10/19 – 30/12/22

- **Global Challenges Research Fund (GCRF):** “A qualitative investigation of Health Coaching as a method for effective healthcare communication”. **£35,025.** 01/12/19 – 30/11/21
- **Global Challenges Research Fund (GCRF):** “**Water and Dental & General Health in Malawi**”: GCRF funding in collaborative project in Malawi with School of Geography. **£75,000.** 01/12/19 – 30/11/21
- **International Dental Federation (FDI): World Dental Development Fund (WDDF)** “Implementing a post-pandemic Health Coaching training programme for empowering dental professionals in disease prevention” CHF 10,000. 17/01/2022 – 30/11/22

***NOTE: TOPS Trial was extended for a further 2 years to November 2021 to fund the analyses, and further funding brought the total to (\$7.8 million)**

APPENDIX I: – current activity as evidenced by Publications in 2019 / 2020 / 2021:

While contributing to those things that I remain passionate about in the Global oral health arena via the WHO, FDI and IADR, I remain an active clinician and clinical teacher in undergraduate and postgraduate programmes at the University of Dundee. I am currently supervising 10 PhD students (as primary or secondary supervisor), and have 3 Research Masters projects underway and I continue to be an active research collaborator globally and actively publish in the fields of Craniofacial anomalies, Cleft lip and palate, Global public health, Orthodontics and Craniofacial imaging.

The following provides a flavor of current research activity - I have either written or been involved in the authorship of a total of 40 research publications since 2019 (which are listed below):

2021

1. Woodsend B, Koufoudaki E, **Mossey PA**, Lin P (2021) Automatic recognition of landmarks on digital dental models. *Computers in Biology and Medicine*: 137; 104819. 1-17
2. Eshete, M, Banko, MA, Hailu, A, Brhanu, A, **Mossey, PA** & Butali, A 2021, 'Amniotic band syndrome associated with extremely severe atypical clefts of the orofacial region', *European Journal of Plastic Surgery*. <https://doi.org/10.1007/s00238-021-01860-y>
3. Gowans, LJJ, Cornick, CL, **Mossey, PA**, Eshete, MA, Adeyemo, WL, Naicker, T, Awotoye, WA, Petrin, A, Adeleke, C, Donkor, P, Busch, TD, James, O, Ogunlewe, MO, Li, M, Olotu, J, Hassan, M, Adeniyani, OA, Obiri-Yeboah, S, Arthur, FKN, Agbenorku, P, Oti, AA, Olatosi, O, Adamson, OO, Fashina, AA, Zeng, E, Marazita, ML, Adeyemo, AA, Murray, JC & Butali, A 2021, 'Genome-Wide Scan for Parent-of-Origin Effects in a sub-Saharan African Cohort With Nonsyndromic Cleft Lip and/or Cleft Palate (CL/P)', *Cleft Palate-Craniofacial Journal*. <https://doi.org/10.1177/10556656211036316>
4. Myat Thwe, A, **Mossey, PA** & Ellis, IR 2021, 'Effect of tyrosine kinase inhibitors on cell migration and Epithelial to Mesenchymal Transition in Asian Head and Neck Cancer cell lines', *Journal of Oral Pathology and Medicine*. <https://doi.org/10.1111/jop.13230>
5. Sarilita, E, Setiawan, AS & **Mossey, PA** 2021, 'Orofacial clefts in low and middle-income countries: A scoping review of quality and quantity of research based on literature between 2010-2019', *Orthodontics & Craniofacial Research*, vol. 24, no. 3, pp. 421-429. <https://doi.org/10.1111/ocr.12458>
6. Tan, L, Lai, SM, Geres, N, Innes, NPT, Radford, JR, Revie, G, **Mossey, PA** & Hector, M 2021, 'Effectiveness of The Wikipedia Collaboration of Dental Schools' Training Programme: a new Paradigm for Teaching and Learning of Evidence-Based Dentistry', *Community Dental Health*, vol. 38. https://doi.org/10.1922/CDH_00091Tan05
7. Adekunle, AA, Olowo, AY, James, O, Adamson, OO, Alade, AA, Agbogidi, FO, Oladega, AO, Ogunlewe, MO, Adeyemo, WL, Busch, TD, **Mossey, PA**, Marazita, ML & Butali, A 2021, 'Facial Anthropometry Measurements Using Three-Dimensional Stereophotogrammetry Analysis Among Nigerians', *Journal of Craniofacial Surgery*. <https://doi.org/10.1097/SCS.0000000000008036>

8. Ayoub, A, De Freitas Silva, L, **Mossey, PA**, Al-Rudainy, D, De Mattos, AM, Garcia Júnior, IR, Quigley, A & Ju, X 2021, 'The characterisation of the craniofacial morphology of infants born with Zika virus: Innovative approach for public health surveillance and broad clinical applications', *Frontiers in Medicine*, vol. 8, 612596. <https://doi.org/10.3389/fmed.2021.612596>
9. Saikia, A, Muthu, MS, Orenuga, OO, **Mossey, PA**, Ousehal, L, Yan, S, Campodonico, M, England, R, Taylor, S & Sheeran, P 2021, 'Systematic Review of Clinical Practice Guidelines for Oral Health in Children With Cleft Lip and Palate', *Cleft Palate-Craniofacial Journal*. <https://doi.org/10.1177/10556656211025189>
10. Li, M, Olotu, J, Buxo-Martinez, CJ, **Mossey, PA**, Anand, D, Busch, T, Alade, A, Gowans, LJJ, Eshete, M, Adeyemo, WL, Naicker, T, Awotoye, WO, Gupta, S, Adeleke, C, Bravo, V, Huang, S, Adamson, OO, Toraño, AM, Bello, CA, Soto, M, Soto, M, Ledesma, R, Marquez, M, Cordero, JF, Lopez-Del Valle, LM, Salcedo, MI, Debs, N, Petrin, A, Malloy, H, Elhadi, K, James, O, Ogunlewe, MO, Abate, F, Hailu, A, Mohammed, I, Gravem, P, Deribew, M, Gesses, M, Hassan, M, Pape, J, Obiri-Yeboah, S, Arthur, FKN, Oti, AA, Donkor, P, Marazita, ML, Lachke, SA, Adeyemo, AA, Murray, JC & Butali, A 2021, 'Variant Analyses of Candidate Genes in Orofacial Clefts in Multi-Ethnic Populations', *Oral Diseases*. <https://doi.org/10.1111/odi.13932>
11. Vanderburg, R, Alonso, N, Desai, P, Donkor, P, **Mossey, PA**, Stieber, E & Mehendale, FV 2021, 'Age at Primary Cleft Lip Repair: A Potential Bellwether Indicator for Pediatric Surgery', *Plastic and Reconstructive Surgery - Global Open*, vol. 9, no. 6, e3657. <https://doi.org/10.1097/GOX.0000000000003657>
12. Woodsend, B, Koufoudaki, E, Lin, P, McIntyre, G, El-Angbawi, A, Aziz, A, Shaw, W, Semb, G, Reesu, GV & **Mossey, PA** 2021, 'Development of intra-oral automated landmark recognition (ALR) for dental and occlusal outcome measurements', *European Journal of Orthodontics*. <https://doi.org/10.1093/ejo/cjab012>
13. Eshete, M, Abate, F, Abera, B, Hailu, A, Demissie, Y, **Mossey, PA** & Butali, A 2021, 'Assessing the Practice of Birth Defect Registration at Addis Ababa Health Facilities', *Ethiopian Journal of Health Sciences*, vol. 31, no. 3, pp. 683-687. <https://doi.org/10.4314/ejhs.v31i3.26>
14. Munger, RG, Kuppaswamy, R, Murthy, J, Balakrishnan, K, Thangavel, G, Sambandam, S, Kurpad, AV, Molloy, AM, Ueland, PM & **Mossey, PA** 2021, 'Maternal vitamin B₁₂ status and risk of cleft lip and cleft palate birth defects in Tamil Nadu state, India', *Cleft Palate-Craniofacial Journal*, vol. 58, no. 5, pp. 567-576. <https://doi.org/10.1177/1055665621998394>
15. Abuhaloob, L, Helles, N, **Mossey, PA** & Freeman, R 2021, 'An ADePT evaluation for incorporating the TIPPS periodontal health intervention into primary care antenatal programmes to enhance infant birth weight in Palestine: a feasibility study', *Pilot and Feasibility Studies*, vol. 7, 91. <https://doi.org/10.1186/s40814-021-00827-x>
16. Sarilita, E, Rynn, C, **Mossey, PA** & Black, S 2021, 'Zygomaticus major muscle bony attachment site: a Thiel-embalmed cadaver study', *Morphologie*, vol. 105, no. 348, pp. 24-28. <https://doi.org/10.1016/j.morpho.2020.06.009>
17. Ayoub, A, Khan, A, Aldhanhani, A, Alnaser, H, Naudi, K, Ju, X, Gillgrass, T & **Mossey, PA** 2021, 'The Validation of an Innovative Method for 3D Capture and Analysis of the Nasolabial Region in Cleft Cases', *Cleft Palate-Craniofacial Journal*, vol. 58, no. 1, pp. 98-104. <https://doi.org/10.1177/1055665620946987>

2020

1. Woodsend, B, Koufoudaki, E, **Mossey, PA** & Lin, P 2020, 'Automatic Recognition of Landmarks on Digital Dental Models', *arXiv*. <<https://arxiv.org/abs/2012.12946>>
2. Woodsend, B, Koufoudaki, E, Lin, P, McIntyre, G, El-Angbawi, A, Aziz, A, Shaw, W, Semb, G, Reesu, GV & **Mossey, PA** 2020, 'Development of intra-oral automated landmark recognition (ALR) for dental and occlusal outcome measurements', *BioRxiv*. <https://doi.org/10.1101/2020.12.16.423094>
3. Cameron, A, Doran, H, Soave, S, Gudynaite, D, Dan, L, **Mossey, PA**, Cura, C, Strachan, J, Short, L & Swann, Z, *Partnerships support meaningful engagement with our community*, 2020, Digital or Visual Products, University of Dundee, Dundee.
4. Zhou, Y, Sinnathamby, V, Yu, Y, Sikora, L, Johnson, CY, **Mossey, PA** & Little, J 2020, 'Folate intake, markers of folate status and oral clefts: An updated set of systematic reviews and meta-analyses', *Birth Defects Research*, vol. 112, no. 19, pp. 1699-1719. <https://doi.org/10.1002/bdr2.1827>

5. Hoyte, T, Ali, A & **Mossey, PA** 2020, 'Cephalometric norms for Bimaxillary Protrusion in Trinidad and Tobago: a preliminary study', *Orthodontic Waves*, vol. 79, no. 2-3, pp. 113-118. <https://doi.org/10.1080/13440241.2020.1820801>
6. Breugem, C, Smit, H, Mark, H, Davies, G, Schachner, P, Collard, M, Sell, D, Autelitano, L, Rezzonico, A, Mazzoleni, F, Novelli, G, **Mossey, PA**, Persson, M, Mehendale, F, Gaggl, A, Van Gogh, C, Zuurbier, P, Reinart, S, De Graaff, F & Meazzini, C 2020, 'Prioritizing cleft/craniofacial surgical care after the COVID-19 pandemic', *Plastic and Reconstructive Surgery - Global Open*, vol. 8, no. 9, e3080. <https://doi.org/10.1097/GOX.0000000000003080>
7. Reesu, G, Mânica, S, Revie, G, Brown, N & **Mossey, PA** 2020, 'Forensic dental identification using two-dimensional photographs of a smile and three-dimensional dental models: a 2D-3D superimposition method', *Forensic Science International*, vol. 313, 110361. <https://doi.org/10.1016/j.forsciint.2020.110361>
8. Alade, AA, Buxo-Martinez, CJ, **Mossey, PA**, Gowans, LJJ, Eshete, MA, Adeyemo, WL, Naicker, T, Awotoye, WA, Adeleke, C, Busch, T, Toraño, AM, Bello, CA, Soto, M, Soto, M, Ledesma, R, Marquez, M, Cordero, JF, Lopez-Del Valle, LM, Salcedo, MI, Debs, N, Li, M, Petrin, A, Olotu, J, Aldous, C, Olutayo, J, Ogunlewe, MO, Abate, F, Hailu, T, Muhammed, I, Gravem, P, Deribew, M, Gesses, M, Hassan, M, Pape, J, Adeniyani, OA, Obiri-Yeboah, S, Arthur, FKN, Oti, AA, Olatosi, O, Miller, SE, Donkor, P, Dunnwald, MM, Marazita, ML, Adeyemo, AA, Murray, JC & Butali, A 2020, 'Non-random distribution of deleterious mutations in the DNA and protein-binding domains of IRF6 are associated with Van Der Woude syndrome', *Molecular Genetics and Genomic Medicine*, vol. 8, no. 8, e1355. <https://doi.org/10.1002/mgg3.1355>
9. Ajiboye, AS, **Mossey, PA**, IADR Science Information Committee & Fox, CH 2020, 'International Association for Dental Research Policy and Position Statements on the Safety of Dental Amalgam', *Journal of Dental Research*, vol. 99, no. 7, pp. 763-768. <https://doi.org/10.1177/0022034520915878>
10. **Mossey, PA** 2020, 'Oral health matters': it is time for a culture change in dentistry', *British Dental Journal*, vol. 228, no. 11, pp. 829-830. <https://doi.org/10.1038/s41415-020-1634-3>
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