



## Poster Sessions at a Glance

### Session 1 ORCA Nathan Cochrane Junior Prize I

Thursday, July 4th, 2024, 11.00-12.00 Room A

Chair Persons: Giacaman R, Schmoeckel J

**1. The extended Ramfjord-teeth Plaque Index: A reliable tool for partial mouth plaque quantification**

*Jung K\* | Hölbling C | Hartmann M | Ganss C*

**2. Innovative management of multiple non-cavitated proximal caries in high-risk patients: combining SDF & orthodontic separators**

*Ahmed Eilaf EA\* | Alnesser S | Mourad MS | Splieth CH | Schmoeckel J*

**3. Salivary biochemical variations induced by a controlled high-lipid diet, in young adults. A clinical study**

*Echeverría C\* | Villalobos-Contreras J | Lozano C | Gambetta-Tessini K | Fernandez CE | Valdés S | Giacaman R*

**4. Changes in salivary biochemical composition after a standardized high-protein diet, in healthy adults. Clinical study**

*Valdés-Naranjo S\* | Villalobos-Contrera J | Lozano C | Fernandez CE | Gambeta-Tessini K | Echeverria C | Giacaman R*

**5. Distinguishing discolored caries lesions using biofluorescence and dental bleaching: An in vitro simulation model study**

*Lee HS\* | Lee ES | Jung HI | Kim BI*

**6. Immediate effect of silver fluoride/potassium iodide application in reducing hypersensitivity in MIH-molars in schoolchildren**

*Ahmed W, Splieth CH, J. Schmoeckel J*

## Session 2 Epidemiology I

Thursday, July 4th, 2024, 11.00-12.00 Room B

Chair Persons: Kühnisch J, Al Masri A

**7. Dental caries prevalence in semi-urban and rural primary schools before and after COVID – 19 pandemic**

*Tzimas K\* | Pahinis K | Pappa E | Rahiotis C*

**8. Caries status in schoolchildren living in central African republic**

*Lamloum D\* | Agnoli MR | La Corte P | Dettori M | Madozein W | Campus G*

**9. Caries prevalence in 8- to 10-year-olds from Bavaria, Germany**

*Kühnisch J\* | Fresen KF | Gaballah R | Schill H | Sapari K | Krämer N*

**10. Prevalence of tooth decay within a Guinea-Bissau community**

*Porto P | Cunha D | Menezes AS | Silva P | Sousa F | Souza S | Nascimento M | Lim R\**

**11. Caries rates in different school environments among older adolescents: a cross-sectional study in Greifswald city**

*Al Masri A\* | Pink C | Splieth CH | Vielhauer A | Abdin M | Younus S | Mourad MS*

**12. Association between cervical dentine hypersensitivity and DMFT index in Turkish population: a cross-sectional study**

*Arıkan M\* | Akarsu S | Aktuğ KS | Atasoy S*

**13. Caries experience associated with molar incisor hypomineralisation (MIH) in Mexican schoolchildren**

*Rivera M\* | Manton D | Karakowsky L | Medina C*

## Session 3 ORCA Nathan Cochrane Junior Prize II

Thursday, July 4th, 2024, 12.00-13.00 Room A

Chair Persons: Santamaría RM, Innes N

**14. Silver diammine fluoride penetration in permanent molars with molar incisor hypomineralisation: Ex-vivo microscopic pilot study**

*Al-Aqaileh N\* | Splieth CH | Scholz K | Santamaría RM*

**15. Daily variation in urinary fluoride excretion in 4-6-year-old children living in fluoridated and non-fluoridated areas**

*Eskandari F\* | Kronic J | Sanderson R | Maguire A | Carlebach S | John S | Zohoori FV*

**16. Bacterial ancient DNA identified in carious teeth from Swedish Vikings**

*Bertilsson C\* | Vretemark M | Lehrkinder A | Lingström P*

**17. Nano silver fluoride sustained-release orthodontic elastomerics as a novel anti-caries material**

*Jun-Hyuk C\* | Eun-Song L | Hoi-In J | Baek-Il K*

**18. Comparative quantitation, expression, characterization of growth factors in autologous non-demineralized and demineralized dentin matrix: An Innovative caries management strategy**

*Sharma SC\**

**19. Patient barriers/facilitators to implementing minimally invasive dentistry; systematic review**

*Lundbeck H\* | Al-Yaseen W | Cope A | Raggio D | Chestnutt I | Guest-Rowlands G | Pattinson R | Hardwick C | Marshman Z | Innes N*

**20. Barriers and facilitators for achieving optimal oral health behaviours in university students**

*Azam T\* | Goodwin M | Kitsaras G | Gomez J*

## Session 4 Epidemiology II

Thursday, July 4th, 2024, 12.00-13.00 Room B

Chair Persons: Mourad MS, Campus G

**21. Global prevalence of root caries in middle-aged and elderly persons: A systematic review and meta-analysis**

*Maklennan A\* | Borg-Bartolo R | Rocuzzo A | Salerno C | Raabe M | Esteves-Oliveira M | Giacaman R | Monterubbianesi R | Campus G*

**22. Oral health inequalities in immigrant populations worldwide: scoping review**

*Banihashem RSA\* | Esteves Oliveira Marcella | Maklennan A | V.A. Douglas G | Castiglia P | Campus G*

**23. Systematic review and meta-analysis on erosive tooth wear prevalence and risk factors in primary teeth**

*Marschner F\* | Kanzow P | Wiegand A*

**24. Impact of clinical consequences of pulp involvement due to caries on oral health-related quality of life in children and adolescents: a systematic review and meta-analysis**

*Reis PPG | Jorge RC | Marañón-Vásquez G | Fidalgo TKS | Maia L C | Soviero VM\**

**25. Can the age be as a risk indicator of caries lesion activity?**

*Petrauskienė S\* | Slabšinskienė E | Žemaitienė M | Grigalauškienė R*

**26. Severity of Early childhood caries in Australia and associations with social determinants**

*Silva M\* | Summers P | Pawlak J | Smith M*

**27. Caries patterns in adolescent dentition: tooth-specific cross-sectional analysis**

*Mourad MS\* | Pink C | Vielhauer A | Abdin M | Splieth CH | Alkilzy M | Al Masri A*

## Session 5 Clinical Studies I

Thursday, July 4th, 2024, 15.00-16.00 Room A

Chair Persons: Fontana M, Abdulrahim R

**28. Sequential application of silver diammine fluoride gel/fluoride varnish to arrest severe early childhood caries**

*Thomas K\* | Padilla Caceres TC | Cervantes-Alagon S | Castillo JL | Reyes CMV | Rothen M | Mancl L | Milgrom P*

**29. Efficacy of silver diammine fluoride in arresting caries in primary teeth according to the frequency of application**

*Abdulrahim R\* | Splieth CH | Khole MR | Santamaría RM*

**30. Progression of caries lesion severity by dentition, tooth location and surface type from age 1-9**

*Fontana M\* | Eckert GJ | Benavides E | Clements DA | Hara AT | Katz B | Keels MA | Levy BT | Levy SM*

**31. Parental satisfaction and children's acceptance immediately after application of silver-fluoride/potassium-iodide for hypersensitive MIH-molars in schoolchildren**

*Ahmed W\* | Splieth CH | Schmoeckel J*

**32. What influences carious lesions in first permanent molars? Revisiting the association between MIH and caries**

*Rios D\* | Mendonça F | Martins D | Grizzo I | Di Campli F | Honório H*

**33. Dental caries and other oral complications in patients after hematopoietic stem cell transplantation**

*Singh PB\* | Nazar M | Rogn Å | Iversen PO*

**34. Oral health-related quality of life in patients with chronic graft-versus-host disease**

*Vovk N\* | Urek M | Cankar K | Nemeth L*

## Session 6 Clinical Studies II

Thursday, July 4th, 2024, 16.30-17.30 Room A

Chair Persons: Carvalho JC, Vach K

**35. Dealing with missing data in long-term retrospective caries trajectory studies**

*Vach K\* | Bock N | Schulz-Weidner N | Ganss C*

**36. Quality assessment of randomized controlled trials published in selected pediatric dental journals: a meta-research**

*Marchezini Reis T\*, Elagami RA, Tedesco TK, Braga MM, Mendes FM, Raggio DP*

**37. Predictors for initiation and progression of caries lesions in adolescents: 3 y clinical trial**

*Carvalho JC\* | Bakhshandeh A | Aimée NR | Kanaan M | Qvist V | Mestrinho HD*

**38. Factors associated with the development of new caries in patients at risk of dental caries**

*Sakuma A\* | Fukui H | Fujimoto R | Kawakami M | Sadamatsu K | Udone A | Kakimoto K | Shibano N | Shimizu M | Fujita C | Ikeda M | Mizuno A | Sugiyama A | Mizuoka T | Okazaki N | Kudo H | Kondo J | Mochizuki H | Tachikawa Y | Aoshima S*

**39. The effect of long-term dental care in a private clinic on prevalence of adult caries**

*Takebuchi R\* | Takano M | Mochizuki H | Masui Y | Suzuki A | Tomono R | Sugiyama A | Nakagawa R | Hattori H | Tokuda K | Sagawa A | Hayashi R | Matsushita Y | Mizuoka T | Tachikawa Y | Tamai S | Takebuchi S | Sato A | Fuku H | Kikuir T | Yukio A*

**40. Investigation of appropriate time interval required between two stimuli in dentine hypersensitivity (DH) clinical studies**

*West N\* | Wright M | West N | Newcombe R | Davies M | Pollard A*

**41. Dental practitioner's diagnosis and point of view in case of marginal defects of restorations**

*Bottenberg P\* | Jacquet W | Vanden AA*

## Session 7 Microbiology I

Thursday, July 4th, 2024, 16.30-17.30 Room B

Chair Persons: Buzalaf NR, Del Rey YC

**42. Acquired pellicle and biofilm engineering by rinsing with hemoglobin solution**

*Araujo TT | Carvalho T | Dionizio AS | Chiaratti M | Henrique-Silva F | Buzalaf NR\**

**43. Prebiotic caries preventing effects of mineral ions released from S-PRG fillers on oral biofilm**

*Kato K\* | Kutsuna R | Kawamura Y | Shimazaki Y*

**44. Arginine decreases the production of matrix carbohydrates and stimulates eDNA release in saliva-derived dental biofilms**

*Assar S | Del Rey YC\* | Kristensen MF | Lund MB | Raittio E | Schramm A | Meyer RL | Schlafer S*

**45. Improved anti-biofilm and anti-caries potential of fluoride combined with calcium and arginine**

*Miranda ML | Danelon M | Nunes GP | Delbem ACB | Brighenti FL\**

**46. Arginine modulates the bacterial community composition and raises microscale pH in saliva-derived dental biofilms**

*Assar S\* | Del Rey YC | Kristensen MF | Lund MB | Raittio EJ | Schramm A | Meyer RL | Schlafer S*

**47. Glucanohydrolases have no antimicrobial effect on *S. mutans***

*Ricomini FAP\* | Xavier-Queiroz M | Åmdal HA | Hamann PRV | Polikarpov I | Petersen FC*

**48. Chitosan MS boosts fluoride uptake and limits bacterial adhesion on human teeth**

*Bacqueville D\* | Souyris M | Kiesow A | Morawietz M | Feuillolay Catherine | Ogalla A | Coumes P | Castex-Rizzi N*

## Session 8 Remineralization-Demineralization I

Friday, July 5th, 2024, 9.30-10.30 Room A

Chair Persons: Malinowski M, Reynolds E

### **49. Enhancement of SnF<sub>2</sub>-remineralisation with CPP-ACP-containing dentifrices in situ**

*Fernando J\*, Reynolds E | Shen P | Yuan Y | Reynolds C*

### **50. In situ remineralization with a toothpaste containing fluoride, casein phosphopeptide, amorphous calcium phosphate, and trimetaphosphate**

*Nunes G\* | Gonçalves F | Quinteiro J | de Almeida E | Delbem A | Cannon M | Danelon M*

### **51. Biomimetic remineralization of human enamel using novel nanohydroxyapatite-enamel matrix derivative-agarose hydrogel**

*El Moshy S | Radwan IA | Matoug-Elwerfelli M\* | Abdou A | Abbass M*

### **52. A new early caries detection aid (BlueCheck) does not inhibit remineralisation of artificial enamel caries**

*Jablonkski-Momeni A | Crombie F | Mangum J\**

### **53. Remineralizing effect of three fluoride-based toothpastes on early enamel lesions: a multidisciplinary analysis**

*Vitiello F\* | Orilisi G | Putignano A | Campus G | Orsini G*

### **54. The effect of a novel alternate soaking method on enamel lesion remineralisation in vitro**

*Sanari A\* | Malinowski M | Strafford SM | Day P | Matsusaki M | Yang XB*

### **55. Remineralization of non-cavitated carious lesions with mineral-loaded cationic starch particles**

*Jones NA\* | Pan LC | Wightman L | Chang SR | Flannagan SE | Jones KA | Lukashova L | Jones GW | Tenuta LMA | Gonzalez-Cabezas C | Clarkson BH | Bloembergen W | Bloembergen S*

### **56. Time-effect comparative evaluation of three professional remineralizing agents on artificial enamel lesions**

*Orilisi G\* | Vitiello F | Tosco V | Monterubbianesi R | Orsini G*



## Session 9 ORCA Nathan Cochrane Junior Prize III

Friday, July 5th, 2024, 9.30-10.30 Room B

Chair Persons: Volgenant C, Ambarkova V

**57. Longevity of fillings and preformed metal crowns in primary molars in German dental private practices**

*Pötter LA\* | Santamaría RM | Vollmer M | Splieth CH | Schmoeckel J*

**58. Distribution of the DMFT index among 12-year-old children from different ethnicity**

*Ambarkova V\* | Jankulovska M | Sotirovska IA | Stamenkova A | Ambarkov J*

**59. Does a first dental visit at a young age lead to lower dental costs in the future?**

*van Ligten\* TS | Duijster D | Volgenant C*

**60. Influence of missing permanent teeth on children's OHRQoL and masticatory performance; a cross-sectional analysis**

*Younus S\* | Al Masri A | Splieth CH | Pink C | Krey KF | Mourad MS*

**61. Prevalence of hypomineralized second primary molars and associated factors in preschool children in Trabzon, Turkey**

*Albayrak EN\* | Yilmaz N | Takaoglu HS | Ozturk MN | Tüzüner T*

**62. Caries trends of 3-year-old children in Taiwan**

*Hsu DY\* | Al Masri A | Huang ST | Splieth CH*

**63. Poverty-fighting organizations in the Netherlands: possible key figures in improving oral health of a vulnerable population**

*Gitz S\* | Volgenant C*

**64. Trends in primary anterior teeth caries - A 3 year retrospective cohort study**

*Saikia A\**

## Session 10 Remineralization-Demineralization II

Friday, July 5th, 2024, 11.00-12.00 Room A

Chair Persons: **Anderson P, Baysan A**

**65. Effects of experimental sonic toothbrushes impregnated with S-PRG fillers on enamel demineralization**

*Inaba D\* | Nakatsuka T | de Josselin de Jong E | Hitomi J*

**66. Toothpaste containing fluoride, casein phosphopeptide, amorphous calcium phosphate and trimetaphosphate on enamel demineralization in situ**

*Danelon M\* | Gonçalves FMC | de Almeida EMFC | Quinteiro JP | Cannon M L | Delbem ACB*

**67. Demineralization inhibition by short chain length glutamic acid polypeptides under caries simulating conditions**

*Alkhaldi M | Hill R | Lynch R | Anderson P\**

**68. The effects of divalent metal ions on demineralization: A real-time ISE Study**

*Shahid S\* | Alfailakawi O | Anderson Paul | Lynch R*

**69. Bioactive resin composite with the potential of ion exchange following incomplete carious lesion removal -A laboratory-based study**

*Ahmed H | Mills D | Davis G | Baysan A\**

**70. Injectable hard tissue bandage with wet adhesion: A biomimetic approach for dental drug delivery**

*Zhen L \* | Zhang M | Li J*

**71. Experimental selective characteristics of early caries lesions after resin infiltrant application**

*Maksymiuk P\* | Zubrzycka J | Wójcik-Chęcińska I | Ptasiewicz M | Chałas R*

## Session 11 ORCA Nathan Cochrane Junior Prize IV

Friday, July 5th, 2024, 11.00-12.00 Room B

Chair Persons: Lippert F, Lara JS

**72. Improving behaviour in dental visits via choice of flavour of fluoride varnish in children**

*Karim R\* | Splieth CH | Schmoeckel J*

**73. Hall technique versus atraumatic restorative treatment in primary teeth: An economic evaluation of a randomized clinical trial**

*Garbim JR\* | Araujo MP | Innes NP | Hesse D | Bonifacio CC | Olegário IC | Braga MM | Mendes FM | Raggio DP*

**74. Evaluation of occlusal compensatory mechanisms following use of the Hall technique for caries management**

*Akyildiz M\* | Innes NP | Al-yaseen W | Zhurov A | Tas A | Sonmez I*

**75. Is the infographic a preferred alternative to texts when disseminating caries-related scientific evidence?**

*Machado GM\* | Leite IP | Crispim AC | Braga MM*

**76. 3D Intraoral scanner (IOS) as an auxiliary tool for dental hard-tissue conditions detection and differentiation**

*Valdivia-Tapia AC\* | Lara JS | Denucci GC | Lippert F | Eckert GJ | Hara AT*

**77. Management strategies for carious anterior deciduous teeth: a systematic review and meta-analysis**

*Oliveira R\* | Garbim J | Pássaro AL | Tedesco T | Raggio D | Mello-Moura ACV*

## Session 12 Microbiology II

Friday, July 5th, 2024, 12.00-13.00 Room A

Chair Persons: Martignon S, Usuga-Vacca M

**78. Prevalence of *Scardovia wiggisiae* in children with early childhood caries: a preliminary study**

*Liao Y \* | Ting P*

**79. Antibiotic resistance in root biofilm of Colombian older adults**

*Usuga-Vacca M \* | Suárez-Ortegón AM | Abril D | Marquez-Ortiz RA | Escobar-Perez J | Castellanos JE | Martignon S*

**80. Preliminary data shifts paradigm: Oral microbial acquisition beyond the “sterile womb”**

*Murata RM\* | Moraes SM | Abuna GF | Pardi V | May L*

**81. Characterization and application of a *Lactobacillus acidophilus* postbiotic on a microcosm biofilm**

*Vale G \* | Santana G | Lima S | Quelemes P*

**82. Effect of rinsing with toothpaste suspensions on biofilm formation in situ**

*Rupf S\* | Lehnertz L | Gund M | Hannig M*

## Session 13 Education

Friday, July 5th, 2024, 12.00-13.00 Room B

Chair Persons: Young A, Braga MM

### **83. Non-operative management of proximal caries in a student clinic**

*Young A\* | Gløersen AE | Grinaker Prøis OG | Kaarbø D | Torgersen G | Skudutyte-Rysstad R*

### **84. Caries detection by dental students: accuracy and perceived challenges**

*Nanda S\* | Louis-Elias N | Jain S | Finkelman M | Ferreira ZA*

### **85. Tutored-active learning to students' caries detection training: costly but worth it – multicentre trial-based economic evaluation**

*Braga MM\* | Yampa-Vargas JD | Machado TGO | Oliveira G | Ferreira FR | Rocha ES | Lenzi TL | Magalhães AC | Rios D | Wang L | Lima MDM | Moura MS | Sanabe ME | Cenci MS | Oliveira EF | Correa MB | Rocha RO | Zenkner JE | Lara JS | Murisi PU | Martignon S | Deery C | Melo P | Imparato JC | Raggio DP | Mendes FM | Ekstrand KR | IuSTC Group*

### **86. Enhancing cariology education of dental undergraduate students with role-play case-studies and patient education material development**

*Noureldin A\* | Lowthorp L*

### **87. Attitudes and experience of use of ICDAS by dental students in IUSD clinics**

*Alfawaz I | Al Dehailan LA | Willis L | Soto-Rojas AE\**

### **88. How is cariology being taught among eight Latin American Dental Schools? A COM-B analysis**

*Cortes A | Jácome - Lievano S | Avila V | Abreu-Placeres N | Aránguiz Vi | Carletto-Körber F | Giacaman R | Polanco C | Pozos-Guillen A | Sanmartín M | Squassi Aldo | Úsuga-Vacca M | Beltrán EO | Malheiros Z | Stewart B | Martignon S | Sanabria Angie\**

### **89. Training students for an artificial intelligence-based platform for deep caries excavation: a randomized controlled trial**

*Ramezanzade S\* | Dascalu T | Bakhshandeh A | Ibragimov B | Bjørndal L*

### **90. Assessing the knowledge and needs of mothers and mothers-to-be regarding oral health**

*Abdelaziz M\* | Jaquier M | LeTinier B | Muller M | Anton y Otero C | Martinez de Tejada B | Leprince GC*

## Session 14 Epidemiology III

Friday, July 5th, 2024, 15.00-16.00 Room A

Chair Persons: Khudanov B, Schulte AG

**91. Cost-effectiveness of punctually applied caries prevention strategy for early childhood caries**

*Kuzmina I\* | Said D | Lapatina A | Pazdnikova N*

**92. OXIS contacts of primary molars in children - do they change over time?**

*Murugan M\**

**93. Influence of age on the longevity of fillings and preformed metal crowns in primary molars**

*Vollmer M\* | Pötter LA | Santamaría RM | Splieth CH | Schmoeckel J*

**94. Clinical consequences of untreated dental caries assessed using pufa/PUFA index on 7-year-old children living in Uzbekistan**

*Khudanov B\* | Gulyamov D | Tuygunov N | Turaev K | Abdurahimova F | Oybutaev S | Schulte A*

**95. Evaluation of Interproximal contact areas between primary second molar & permanent first molar using OXIS classification**

*Kirthiga M\**

**96. Association between fissure sealing and caries experience in young German persons with autism spectrum disorder**

*Brejcha S | Schulte AG | Fricke O | Krombholz A | Schmidt P\**

**97. Validity of CARIOGRAM for early childhood caries prediction. A 48-month follow-up study**

*Murisi P\* | Lara JS | Peralta-Benavides J | Moran-Sanchez CE | Romano A | Alonso C | Soto-Rojas A | Campus G*

**98. Assessment of treatment needs of a group of Lebanese autistic children: a case-control study**

*Tarabaih A\* | Kassab R*

## Session 15 Diagnosis

Friday, July 5th, 2024, 15.00-16.00 Room B

Chair Persons: Ekstrand KR, Keels MA

- 99. Prevalence and progression pattern of approximal caries lesions on Danish adolescents. A radiographic study. Part 1**  
*Ekstrand KR\* | Kristensen A | Bakhshandeh A*
- 100. Prevalence and progression of approximal caries lesions among Danish adolescents. 2.5-year radiographic study. Part 2**  
*Bakhshandeh A\* | Kristensen AR | Ekstrand KR*
- 101. Diagnosing and recording root caries: a survey among Swiss dentists**  
*Wierichs RJ\* | Kaspari I | Maniewicz S | Campus G | Tennert C | Saads CThiago | Niemeyer SH*
- 102. Usability assessment of Cariodata: electronic system for caries data recording by dental students**  
*Rodrigues LKA\* | Carvalho NO | Campos GMT | Rodrigues ACN | Marques VF | Sampaio AL | Silva RBT | Neves BG*
- 103. Assessment of first molar caries in children by visual and Near-Infrared Light Transillumination method**  
*Łagocka R\* | Strzelecka P | Kubala E | Barczak K | Lietz-Kijak D*
- 104. Assessment of pulpal oxygen saturation in carious and restored posterior teeth**  
*Rup Ariel G\* | Buchmann M | Parolo CCF | Alves LS | Maltz M*
- 105. Detection of pit and fissure sealant microleakage using biofluorescence**  
*Lee ES\* | Ku HM | Nam SM | Kim BI*
- 106. Improving the accuracy of dental caries diagnosis – advantages of bitewing radiographs**  
*Keels MA\* | Fontana M | Eckert GJ | Benavides E | Clements DA | Hara AT | Katz B | Levy BT | Levy SM | Caries Risk Group*
- 107. Effect of ambient light on outcome measures recorded using a QLF-D Biluminator™**  
*Molyneux LE\* | Youngson CC | Smith PW | Higham SM*

## Session 16 Public Health

Friday, July 5th, 2024, 16.30-17.30 Room A

Chair Persons: van der Veen M, Beltran E

- 108. Survival of different caries managements in children with autism and unaffected peers: a clinical audit**  
*Salerno C\* | Cirio S | Campus G | Cagetti MG*
- 109. Oral health related quality of life in 3-6-year-old children with severe decay in Turkey: pilot study**  
*Taşdemir T\**
- 110. Caries treatment with silver diammine fluoride in disabled patients in the Netherlands: a questionnaire study**  
*Grgic CO\**
- 111. Enhancing aerosol mitigation to reduce viral contamination in simulated caries-related tooth-preserving operative care**  
*Beltran E\* | Velandia-Romero M | Castellanos J | Avila V | Martignon S*
- 112. Oral microbiome of adults in UK residential care homes: a cross-sectional analysis from an RCT**  
*Sherley J\* | Vida Z*
- 113. Parents' perspectives regarding the influence of the living environment in Amsterdam North on their food choices**  
*van der Veen M\* | Bergen F | Gökkaya I | İmaç D | Mienstra I | Munster S | Poelstra M | Chau B*
- 114. Considering home language in the management of childhood caries**  
*Anderson M\**



## Session 17 Artificial Intelligence

Friday, July 5th, 2024, 16.30-17.30 Room B

Chair Persons: Neuhaus KW, Krithikadatta J

**115. Can we generate reliable images of caries using AI in an e-learning for dental students?**

*Lagerweij M\* | Volgenant C | Groot Elias*

**116. Instance and class I occlusal caries segmentation from digital occlusal images using novel unified deep learning scheme and IoT**

*Krithikadatta J\* | Mohan R | Veeraiyan DN | Rama A*

**117. Artificial intelligence-based caries detection. Diagnostic performance on photos and 3D intraoral scans**

*Michou S\* | Benetti AR | Bakhshandeh A | Ekstrand KR | Rahiotis C*

**118. Detection of caries around restorations on bitewings using deep learning**

*Trota CE | Vinayahalingam S | van Nistelrooij N | Xi T | Romero VHD | Flügge T | da Silveira LG | Loomans B | Huysmans MC | Mendes FM | Cenci M\**

**119. In vitro validation of neuronal network software to detect interdental primary caries in bitewing radiographs**

*Neuhaus KW \* | Sonderegger S | Schilling L | Lussi A*

**120. AI-based caries detection and classification on photographs from anterior teeth with early childhood caries**

*Dujic H\* | Schwarzmaier J | Schwendicke F | Kühnisch J*

**121. Detecting erosive tooth wear with an intraoral scanner and different methods of scan alignment**

*Loumprinis N\*, Michou S, Rahiotis C*

## Session 18 Fluoride I

Saturday, July 6th, 2024, 9.00-10.00 Room A

Chair Persons: Carvalho TS, Crystal YO

**122. Effect of dental varnish sodium fluoride concentration on the CaF<sub>2</sub>-like deposition**

*Rocha GTC\* | Alves da Silva Barros MC | Abbado de Souza LF | de Paula Costa M | Buhler BA*

**123. Effect of fluoride-containing solutions on the proteomic composition of in vitro dentine pellicles**

*Niemeyer SH | Buzalaf MAR | Hannig M | Baumann T | Carvalho TS\**

**124. Effects of hydroxyapatite containing toothpastes on some caries-related variables: a randomized clinical trial**

*Campus G | Camoni N\* | Fabio C | Wierichs RJ | Wolf TG | Salerno C | Arghittu A | Dettori M | Cagetti MG*

**125. Assessment of preventive effect in enamel of Nd:YAG laser combined with fluoride at different pH**

*Caramel-Juvino A | Avelino S | Amaral M | Eduardo C | Zezell D\**

**126. Silver and fluoride release from SDF treated carious lesions: Effect of LED curing light**

*Crystal YO\**

**127. Trajectories of salivary fluoride levels after use of 1,450 and 5,000 ppm fluoride toothpaste: a secondary analysis**

*Staub LL\* | Nyvad B | Baelum Vibeke | Raittio E*

## Session 19 Clinical Studies III and Behavioral Sciences

Saturday, July 6th, 2024, 9.00-10.00 Room B

Chair Persons: Schlafer S, Bonifácio C

- 128. Comparison of different plaque disclosing agents for semi-automated planimetry**  
*Schlafer S\* | Assar S*
- 129. Salivary concentration of two probiotic strains administered via chewing-gum. An in vivo pilot study**  
*Cirio S\* | Campus G | Camoni N | Salerno C | Cagetti MG*
- 130. Carbohydrates and dietary fiber consumption in a sample of vegans and omnivorous**  
*Silva-Acevedo C\* | Mansilla S | Durán S | Vargas González C | Fernández CE*
- 131. Nitrate, nitrite and ammonium in saliva from vegans and omnivorous**  
*Fernández CE\* | Vargas-Gonzalez C | Matirana-Valenzuela C*
- 132. Restoration repair in primary molars: preliminary findings of an RCT**  
*Raggio DP\* | Garbim JR | Freitas R | Passaro AL | Moro B | Braga MM | Mendes FM | Tedesco T*
- 133. Factors influencing oral health behaviour (OHB) in 2-year-old children: Insights from KUNO-kids birth cohort study**  
*Lennon ÁM\* | Musiol C | Hiller KA | Nils G | Buchalla W*
- 134. Self-reported oral health in relation to gaming habits**  
*Ishizuka Y\* | Bertilsson C | Lingström P*
- 135. A qualitative reflexive thematic analysis exploring parents' perceptions of minimally invasive caries management strategies**  
*Protasa N\* | Stars I | Maldupa I | Stamere U*
- 136. Acceptance of non-aesthetic treatment approaches for dental caries in children: a systematic review**  
*Reinhard A | Sampaio C | Zen I | Pessan J | Tedesco T | Bonifácio C\**
- 137. The acceptability of intraoral imaging in children with caries**  
*Young S\* | Allen N | Farmer N | Dawett B | Leighton P | Blake H | Deery C | Marshman Z*

## Session 20 Fluoride II

Saturday, July 6th, 2024, 10.30-11.30 Room A

Chair Persons: Cury JA, Levy S

**138. Evaluation of potentially bioavailable fluoride concentration in toothpastes sold in Madagascar**

*Pagotto LL\* | Caroliny de Brito B L | Tabchoury CPM | Ricomini-Filho AP | Toussaint R | Razafimamonjy L | Raniviohalanto E | Marsais T | Holmgren C | Decroix B | Cury JA*

**139. Total, soluble and ionic fluoride content in dentifrices for children commercialized in Argentina**

*Valadas LAR\* | Sorazabal A | Argentieri AB | Salgado P | Lotif M | Squassi A*

**140. Determination and visualization of enamel fluoride uptake of fluoride with a new plant-based amine technology**

*Morawietz M\* | Michler N | Ufer C | Gieth S | Kiesow A*

**141. KI Reduces the staining after application of SDF and AgF**

*Davidopoulou S\* | Mochamant I | Dionysopoulos D | Mourouzis P | Tolidis K*

**142. Clinical evidence on hydroxyapatite dentifrices for dental caries prevention: A systematic review**

*Pereira de LV\* | Pattinaja T | Volgenant CMC*

## Session 21 Erosion I

*Saturday, July 6th, 2024, 10.30-11.30 Room B*

**Chair Persons: Schlueter N, Niemeyer S**

- 143. Enamel surface demineralization by acidic drinks and its remineralization**  
*Park YS\**
- 144. An extract of polyphenol-rich berries from *Myrtus communis* does not protect enamel from erosion**  
*Baumann T\* | Bergmann R | Niemeyer SH | Carvalho TS*
- 145. Impact of a grape seed extract solution with fluoride on the proteomic composition of the dentine pellicle**  
*Niemeyer S\* | Baumann T | Buzalaf M | Hannig M | Saads CT*
- 146. Impact of smear layer modification on tin retention on simulated erosive tooth wear dentin surfaces**  
*Luka B\* | Ganss C | Luehrs AK | Vach K | Schlueter N*
- 147. Smear layer modification on experimental dentin sample surfaces to simulate erosive tooth wear dentin surfaces**  
*Luehrs AK\* | Ganss C | Luka B | Vach K | Schlueter N*
- 148. Effect of Titanium Tetrafluoride varnish in preventing erosive tooth wear in rats – in vivo model**  
*Vertuan M | Silva JF | Valle AD | Souza BM | Mosquim V | Araujo TT | Martini T | Niemeyer SH | Esteves-Oliveira M | Magalhães AC\**
- 149. Protective effect of aminomethacrylate polymer added to a fluoride dentifrice against erosive tooth wear**  
*Borges AB | Bottesini VC | Santos MER | Scaramucci T | Torres CRG*
- 150. Effect of different brushing parameters on erosive tooth wear in primary bovine enamel and dentin**  
*Kanzow P\* | Witt C | Lechte C | Barke S | Rohland B | Schmidt A | Wiegand A*

## Session 22 Restorations, Hard Tissues and Pulp Dentin Reactions

Saturday, July 6th, 2024, 11.30-12.30 Room A

Chair Persons: Juric H, Abdin M

**151. Evaluation in vitro of a new glass ionomer containing zinc oxide nanoparticles and calcium glycerophosphate**

*Toledo P\* | Meira MF | Bernadez A | Ravaro L | Camargo E | Danelon M*

**152. Success rate of the restorative strategies on posterior teeth with DDE - systematic review**

*Tedesco TK\* | Pascareli-Carlos AM | Souza BTA | Ribeiro RM | Floriano I | Diniz MB | Bezerra SJC | Raggio DP | Novaes TF*

**153. Management of deep caries lesions in primary molars with pulpotomy and crown – retrospective practice-based study**

*Brenner I | Abdin M\* | Schmoeckel J*

**154. Effect of acidic drinks on the surface roughness of glass based materials**

*Gorseta K | Juric H\* | Glavina D*

**155. Immunohistochemical study of antigen presenting and endothelial cells in dental pulp**

*Sotirovska Ivkovska A\* | Georgiev Z | Bajraktarova Valjakova E*

**156. Correlation between dental pulse oximetry, pulp histology and stages of caries (ICDAS)**

*Tenyi A | Cankar K\* | Golez A | Milutinovic A*

**157. Photobiomodulation associated to a 58S bioactive glass on pulp cells differentiation as dentin hypersensitivity treatment**

*Viana I\* | Marchi J | Feitosa S | Marques M | Sipert C | Scaramucci T*

**158. MOCS: A multifunctional oral cavity simulator for carious lesions and erosive tooth wear studies**

*Maske TT\* | Arthur RA | Patzlaff R | Cenci MS | MOCS Initiative | Hashizume LN | Maltz M*

## Session 23 Erosion II

Saturday, July 6th, 2024, 11.30-12.30 Room B

Chair Persons: Denucci G, Avila V

**159. BlueRemin® and silver diammine fluoride associated with stannous fluoride toothpaste on erosive tooth wear**

*Gómez V\* | Díaz M | Marro F | Cabello R*

**160. Proline-rich proteins concentrations in adolescents with ETW, extensive caries and sound enamel**

*Avila V\* | Beltran EO | Castellanos J | Velandia M | Proctor G | Martignon S*

**161. Management of dental erosion in patients with gastroesophageal reflux: impact on oral health related quality of life**

*Nguyen TD | Phung MT | Lu ML | Tran TT\**

**162. Effect of air-abrasion pre-treatment with bioactive glass 45S5 on enamel surface loss after erosion/abrasion challenge**

*Dionysopoulos D\* | Tolidis K*

**163. Impact of erosion and aging simulation on chairside materials**

*Mourouzis P\* | Tsiveli A | Tsetseli P | Dionysopoulos D | Tolidis K*

**164. Influence of in situ salivary pellicle on dental erosion**

*Câmara JV \* | Trautmann S | Pütz N | Schmitt V | Allgayer T | Kautenburgerb R | Hannig M*

**165. Dental adhesive protection against non-carious cervical lesions development**

*Denucci GC\* | Lima LC | Eckert G | Silva Flávia RO | Scaramucci T | Sochacki SF | Hara AT*

**166. Baseline lesion softening and fluoride delivery mode affect re-hardening of erosive enamel lesions in vitro**

*Lynch RJM \* | McClure HM | Haider AA | Lucas RA*