

Unsere wichtigsten Forschungsleistungen im Jahr 2020. Das Jahr 2020 war - wie für uns Alle - geprägt durch die Corona-Pandemie. Forschungsarbeiten, wie auch unsere praktischen Kurse „Medizinische Mikrobiologie für Zahnmediziner“, mussten unter besonderen Hygienemaßnahmen durchgeführt werden. Trotz dieser Einschränkungen gelang es uns wichtige Forschungsarbeiten abzuschließen und neue zu initiieren:

Gemeinsam mit den Kollegen der Mund-, Kiefer- und Gesichtschirurgie haben wir die bakteriziden Effekte und die Eindringtiefe von physikalischem Kaltplasma (Anregung des Edelgas Argon durch ein elektromagnetisches Feld) zur Knochensterilisation evaluiert (Kniha et al. 2020). Wir haben an der Entwicklung zweier neuartiger biofunktionalisierter Nanopartikel zur antimikrobiellen Beschichtung von zahnmedizinischen Implantaten beigetragen. Mit den Kollegen aus dem DWI-Leibniz Institut für Interaktive Materialien haben wir biofunktionalisierte Zink-Peroxid Nanopartikel entwickelt und ihre pH-abhängige bakterizide Wirkung auf Parodontitis-Erreger bewiesen, wie auch die Nanopartikel-Bakterienzellen Interaktionen mittels Transmissions-Elektronenmikroskopie und Lebend-/Tod-Färbung bildlich dargestellt (Fröber et al. 2020). Mit einer der RWTH-Strategie gemäßen inter fakultären und internationalen Studie haben wir Keramik mit künstlichem Zahnschmelzmaterial zunächst biologisiert und dann durch Einlagerung von Silber-Nanopartikel anti-infektiv funktionalisiert (Goldschmidt et al. 2020). In einer klinischen Studie der Zahnärztlichen Prothetik mit 14 Probanden, die Implantat-Probekörper aus Titan bzw. Keramik im Mund trugen, haben wir die Entwicklung des aufgelagerten Mikrobioms nach 3 und 31 Tagen untersucht. In Abhängigkeit von der Oberflächenrauigkeit wurden quantitative, aber kaum qualitative Unterschiede nachgewiesen (Herrmann et al. 2020). In einer weiteren klinischen Studie haben wir mit Kollegen der Zahnerhaltung aus der Schweiz, Hamburg und Leipzig die bakterielle Gesamtaktivität, wie auch die Expression des Schlüsselenzyms Laktatdehydrogenase, bei Kariespatienten und kariesfreien Vergleichsprobanden untersucht. Die Gesamtaktivität der Karieserreger erhöht sich in Läsionen, wobei das Schlüsselenzym aber nur kurzfristig (nach Zuckerimpuls) aktiviert wird (Walther et al. 2020). Es gab mehrere Einladungen für deutschsprachige Beiträge in vielgelesenen, gesundheitsorientierten Medien, wie Zahnärztliche Mitteilungen (Conrads: Das orale Mikrobiom und seine kariogenen Spezies), Quintessenz Zahnmedizin (Conrads: Zutritt verboten: Wie im Mund die Invasion von Mikroben verhindert wird) oder auch Apotheken Umschau online (Conrads im Interview: Mundflora: Schwer was los).

An folgenden Kongressen haben wir uns in 2020 beteiligt: Jahreskongress der Deutschen Gesellschaft für Hygiene und Mikrobiologie, DGHM, in Leipzig (präsentiert von Dr. Abdelbary), Kongress der Brasilianischen Zahnmedizinischen Gesellschaft, SBPqO, (virtuell, präsentiert von Dr. Braga), Deutsche Gesellschaft für Zahnerhaltung, DGZ in Dresden (präsentiert von Dr. Braga), Anaerobe Society of the Americas, ASA, (virtuell, präsentiert von Prof. Conrads) sowie Neue Arbeitsgruppe Parodontologie e.V. (Übersichtsvortrag zum oralen Mikrobiom und seinen Virulenzfaktoren von Prof. Conrads).

Die mit Prof Ch. Apel (AME der RWTH, BioTex-Team) gemeinsam betreute Doktorandin, Frau F. Hetrodt, durfte sich über die Auszeichnung der besten zahnmedizinischen Promotion des Jahres 2020 freuen.

2020 Peer-reviewed publications

Kniha, K., S. Möhlhenrich, a. Bock, N. Ayoub, A. Modabber, F. Hölzle, **G. Conrads***, and E. Goloborodko*
*geteilte Seniorposition

Evaluation of the bactericidal effect of cold atmospheric pressure plasma on contaminated human bone – an in vitro study

British Journal of Oral and Maxillofacial Surgery, 2020 Apr;58(3):329-333. doi: 10.1016/j.bjoms.2020.01.003. Epub 2020 Jan 20. PMID: 31969253

Froeber, K., C. Bergs, A. Pich, and **G. Conrads**

Biofunctionalized zinc peroxide nanoparticles inhibit peri-implantitis associated anaerobes and *Aggregatibacter actinomycetemcomitans* pH-dependent.

Anaerobe, 2020 Apr;62:102153. doi: 10.1016/j.anaerobe.2020.102153. Epub 2020 Jan 18.

Herrmann, H., J.S. Kern, Th. Kern, J. Lautensack, **G. Conrads**, and S. Wolfart

Early bacterial adhesion/biofilm formation and mature plaque composition on four different dental implant materials: an in vivo human study.

Clinical Oral Implant Research, 2020 Sep 1. doi: 10.1111/clr.13656. Online ahead of print.

Goldschmidt, G.-M., M. Krok-Borkowicz, R. Zybalá, E. Pamula, R. Telle, **G. Conrads***, and K. Schickle*
*geteilte Seniorposition

Biomimetic in situ co-precipitation of calcium phosphate/silver composite on zirconia ceramic materials for surface functionalization in terms of antimicrobial and osteoconductive properties

Dental Materials, 2020 Nov 25:S0109-5641(20)30272-4. doi: 10.1016/j.dental.2020.09.018. Online ahead of print.

Walther, W., S. Zumbülte, C. M. Faerber, R. J. Wierichs, H. Meyer-Lueckel, **G. Conrads, K. Henne***, and M. Esteves-Oliveira*
*geteilte Seniorposition

Analysis of relative bacterial activity and *ldh*-gene expression of caries-associated bacteria in a site-specific natural biofilm

Clinical Oral Investigations. 2020 Nov 23. doi: 10.1007/s00784-020-03691-w. Online ahead of print. PMID: 33226500.

Conrads, G. Zutritt verboten: Wie im Mund die Invasion von Mikroben verhindert wird
Quintessenz Zahnmedizin, Jhg. 71, Ausgabe 12, Dez. 2020.

Conrads, G. Das orale Mikrobiom und seine kariogenen Spezies
ZM Zahnärztliche Mitteilungen 23-24/2020 Dez 2020.

Pressespiegel:

Conrads, G. Mundflora: Schwer was los. Ein Interview von Claudia Doyle
Apotheken Umschau Online, 13.11.2020.

2020 Book Chapters:

M. C. Claros, Z.C. Claros, S. S. Yekta-Michael, and **G. Conrads**

Oral and Intestinal Bacteroidetes

Chapter 7 (20 Seiten)

In: I. de Filippis and M.L. McKee (Eds.): Molecular Typing in Bacterial Infections, 2nd. Edition,

Springer Science+Business Media New York

Submitted 01-2020, In press

2020 Besondere Auszeichnung:

Franziska Hetrod: Beste Dissertation in der Kategorie Zahnmedizin 2020 für die Arbeit:

Hetrod, F., J. Lausch, H. Meyer-Lückel, G. Conrads, and C. Apel, Evaluation of restorative materials containing preventive additives in a secondary caries model in vitro Caries Research, 2019 Feb 20:1-10. doi: 10.1159/000496401. Gleichzeitig Oral-B-goldprize 2018, Deutsche Gesellschaft für Kinderzahnheilkunde.

2020 Meeting abstracts**M.M.H. Abdelbary, G. Wilms and G. Conrads (P)**

Typing method for identifying and discriminating salivarius group streptococci
6th. Joint Conference of the German Society for Hygiene and Microbiology (DGHM) and the Association for General and Applied Microbiology (VAAM).
In: BIOSpektrum (expected)
08-11 March 2020 in Leipzig, Germany.

M.M.H. Abdelbary, G. Wilms and G. Conrads (P)

Comparative genomics reveal insights into genomic plasticity and habitat adaptation of *Streptococcus parasanguinis*
6th. Joint Conference of the German Society for Hygiene and Microbiology (DGHM) and the Association for General and Applied Microbiology (VAAM).
In: BIOSpektrum (expected)
08-11 March 2020 in Leipzig, Germany.

A. S. Braga, J. G. Pires¹, F. Melo, L. L. Saldanha, A. L. Dokkedal, **G. Conrads**, A. C. Magalhães, M. Esteves-Oliveira (V)
Effect of different experimental mouthrinses containing natural/herbal extracts on caries-associated bacteria. A microcosm biofilm model 66th. ORCA Congress (The European Organisation for Caries Research), session 1: Microbiology
08.-11. 07. 2020 in Cagliari, Sardinia, Italy.

Froeber, K., C. Bergs, A. Pich, and G. Conrads (P)

Biofunctionalized zinc peroxide nanoparticles inhibit peri-implantitis associated anaerobes
In: Abstract book "2020 Anaerobe Seattle"
The 15th Biennial Congress of the Anaerobe Society of the Americas
23.07.-26.07.2020 in Seattle, Washington, USA (as Zoom conference because of Corona-Pandemic)

Y. Shi, C. Bergs, A. Pich, and G. Conrads (P)

Isoeugenol-modified nanogel-coatings for implant protection
In: Abstract book "2020 Anaerobe Seattle"
The 15th Biennial Congress of the Anaerobe Society of the Americas
23.07.-26.07.2020 in Seattle, Washington, USA (as Zoom conference because of Corona-Pandemic)

Braga, A.S., J. G. Pires, F. Melo, L. L. Saldanha, A. L. Dokkedal, **G. Conrads**, A. C. Magalhães and M. Esteves-Oliveira (P)
Effect of different experimental mouthrinses containing natural/herbal extracts on caries-associated bacteria. A microcosm biofilm model
37th. Annual Congress Brazilian Division of IADR (SBPqO). Virtula congress (corona) 09.-12.09.2020 in Brazil
In: Brazilian Oral Research

Braga, Aline S., Fernanda P.S.R de Melo, Dr. Leonardo L. Saldanha, Anne L. Dokkedal, Tobias Meißner, Maximilian Bemann, Ellen Schulz-Kornas, Rainer Haak, **Georg Conrads**, Ana Carolina Magalhães, and Marcella Esteves-Oliveira
Karieshemmende Wirkung von Pflanzenextrakten aus *Vochysia tucanorum*, *Myrica bella*, *Matricaria chamomilla* and *Malva sylvestris*
4. Gemeinschaftstagung der DGZ und der DGET mit der DGPZM und der DGR²Z; 26. – 28.11.2020; Dresden: HAUPTKONGRESS am 27./28.11.2020

Conrads, G.

Das orale Mikrobiom und seine Virulenzfaktoren
28. Jahrestagung der NAgP e.v. (Neue Arbeitsgruppe Parodontologie)
26.09.2020 (virtuell)

2019 Peer-reviewed publications

Clever, K., K. A. Schlegel, H. Kniha, **G. Conrads**, L. Rink, A. Modabber, F. Hölzle, and K. Kniha. Experimental peri-implant mucositis around titanium and zirconia implants in comparison to a natural tooth: **part 1**-host derived immunological parameters. *International Journal of Oral & Maxillofacial Surgery*, 2019 Apr;48(4):554-559.

Clever, K., K. A. Schlegel, H. Kniha, **G. Conrads**, L. Rink, A. Modabber, F. Hölzle, and K. Kniha. Experimental peri-implant mucositis around titanium and zirconium implants in comparison to a natural tooth: **part 2**-clinical and microbiological parameters. *International Journal of Oral & Maxillofacial Surgery*, 2019 Apr;48(4):560-565.

Hetrodt, F., J. Lausch, H. Meyer-Lückel, **G. Conrads**, and C. Apel, Evaluation of restorative materials containing preventive additives in a secondary caries model in vitro *Caries Research*, 2019 Feb 20:1-10. doi: 10.1159/000496401. **Oral-B-goldprize 2018, Deutsche Gesellschaft für Kinderzahnheilkunde. Beste Dissertation in der Kategorie Zahnmedizin 2020**

Hetrodt, F., J. Lausch, H. Meyer-Lückel, **G. Conrads**, and C. Apel, Einfluss von Carolactonhaltigen Füllungsmaterialien auf die Entstehung einer Sekundärkaries in vitro. *Oralprophylaxe und Kinderzahnheilkunde* 41, 2019 (1) Seiten 44-45.

Conrads, G., J. Westenberger, M. Lürkens, M. M.H. **Abdelbary**. Isolation and bacteriocin-related typing of *Streptococcus dentisani*. *Frontiers in Cellular and Infection Microbiology* 2019 Apr 16;9:110. doi: 10.3389/fcimb.2019.00110. eCollection 2019.

Conrads, G., L. Wendt, F. **Hetrodt**, Z.-L. Deng, D. Pieper, **MMH Abdelbary**, A. Barg, I. Wagner-Döbler, and C. Apel. Deep sequencing of biofilm microbiomes on dental composite materials. *Journal of Oral Microbiology*, 2019 May 14;11(1):1617013. doi: 10.1080/20002297.2019.1617013. eCollection 2019.

Conrads, G. and MMH Abdelbary, Challenges of next-generation sequencing targeting anaerobes, *Anaerobe*. 2019 Feb 12. pii: S1075-9964(19)30029-0. doi: 10.1016/j.anaerobe.2019.02.006. [Epub ahead of print].

2019 Book Chapter

G. Conrads, E. Nagy, and E. Könönen, *Bacteroides*, *Porphyromonas*, *Prevotella*, *Fusobacteria*, and other anaerobic Gram-negative rods, In: *Manual of Clinical Microbiology*, Edition 12, section II, chapter 56, pages 995-1023 (29 Seiten), (February 2019).

2019 Meeting abstracts

C. Walther, S. Zumbülte, C. M. Faerber, H. Meyer-Lueckel, G. Conrads, K. Henne, M. Esteves-Oliveira, Analysis of relative bacterial activity and *ldh*-gene expression of caries-associated bacteria in a site-specific natural biofilm, 66th. ORCA Congress (The European Organisation for Caries Research), session 1: Microbiology 03.-06. 07. 2019 in Cartagena, Colombia.

K. Kniha, H. Kniha, **G. Conrads**, L. Rink, K. Clever, A. Modabber, and F. Hölzle, Effect of inflammation on the soft tissue around titanium and zirconium implants in comparison to natural teeth, 28. Annual Meeting of the European Association for Osseointegration (EAO) 26.-28.09.2019 in Lisboa, Portugal

G. Conrads (discussion panel)

Tackling infectious diseases & antimicrobial resistance, European Research and Innovation days.

24.-26.09.2019 in Brussels, Belgium

2018 Peer-reviewed publications

Hetrodt, F., J. Lausch, H. Meyer-Lückel, C. Apel, and G. Conrads

Natural saliva as an adjuvant in a secondary caries model based on *Streptococcus mutans* Archives in Oral Biology, 2018, 90, 138–143. Impact: 2.050

Conrads, G., J. A. Bockwoldt, C. Kniebs, and M. M.H. Abdelbary

Commentary: Health-associated niche inhabitants as oral probiotics: the case of *Streptococcus dentisani*

Frontiers in Microbiology, 2018 | <https://doi.org/10.3389/fmicb.2018.00340> Impact: 4.019

Henne, K., H. Schilling, M. Stoneking, G. Conrads, and H.-P. Horz

Sex-specific differences in the occurrence of *Fusobacterium nucleatum* subspecies and *Fusobacterium periodonticum* in the oral cavity

Oncotarget, 2018, Vol. 9, (No. 29), pp: 20631-20639. Impact: 5.168

Walther, C., H. Meyer-Lückel, G. Conrads, M. Esteves-Oliveira, and K. Henne

Correlation between relative bacterial activity and lactate dehydrogenase expression of co-cultures in vitro

Clinical Oral Investigations, 2018 Jul 6. doi: 10.1007/s00784-018-2547-2. Impact: 2.386

Conrads G. and I. About

Pathophysiology of Dental caries

Monogr Oral Sci. 2018;27:1-10. RG Journal Impact: 4.89

Clever, K., K. A. Schlegel, H. Kniha, **G. Conrads**, L. Rink, A. Modabber, F. Hölzle, and K. Kniha

Experimental peri-implant mucositis around titanium and zirconium implants in comparison to a natural tooth – Part 1

International Journal of Oral & Maxillofacial Surgery, in press, Impact: 2.164

Clever, K., K. A. Schlegel, H. Kniha, **G. Conrads**, L. Rink, A. Modabber, F. Hölzle, and K. Kniha

Experimental peri-implant mucositis around titanium and zirconium implants in comparison to a natural tooth – Part 2

International Journal of Oral & Maxillofacial Surgery, in press, Impact: 2.164

2018 Meeting abstracts

G. Conrads and M.M.H Abdelbary (V)

Challenges of Next-Generation-Sequencing Targeting Anaerobes

In: Abstract book “2018 Anaerobe Las Vegas” SVIII-1 (page 32)

The 14th Biennial Congress of the Anaerobe Society of the Americas
09.07.-12.07.2018 in Las Vegas, Nevada, USA

K. Henne, H. Schilling, M. Stoneking, G. Conrads, and H.-P. Horz (P)
Sex-specific differences in the incidence of *Fusobacterium nucleatum* subspecies in the oral cavity

In: Abstract book "2018 Anaerobe Las Vegas" PI-8 (page 116)
The 14th Biennial Congress of the Anaerobe Society of the Americas
09.07.-12.07.2018 in Las Vegas, Nevada, USA

M.M.H Abdelbary and G. Conrads (P)

Evaluation of commonly used primers targeting 16S rRNA genes in next-generation sequencing (NGS) based studies.

In: Abstract book "2018 Anaerobe Las Vegas" PI-38 (page 148)
The 14th Biennial Congress of the Anaerobe Society of the Americas
09.07.-12.07.2018 in Las Vegas, Nevada, USA

2017 Peer-reviewed publications

Kather, M., **M. Skischus**, P. Kandt, A. Pich*, **G. Conrads***, S. Neuss-Stein*

*shared authorship

Functional isoeugenol modified-nanogel coatings for design of biointerfaces
Angew Chem Int Ed Engl. 2017 Feb 20;56(9):2497-2502. doi: 10.1002/anie.201609180.

Kather, M., **M. Skischus**, P. Kandt, A. Pich*, **G. Conrads***, S. Neuss-Stein*

*geteilte Autorenschaft

Funktionelle Isoeugenol modifizierte Nanogel-Beschichtungen für Biologische Grenzflächen
Angewandte Chemie, Communication – 2017 (Übersetzung zu engl. Artikel, separat erschienen)

Preshaw Ph., **K. Henne**, J.J. Taylol, R.A. Valentine, and **G. Conrads**

Age-related changes in immune function (immune senescence) in caries and periodontal diseases: a systematic review

J Clin Periodontol. 2017 Mar;44 Suppl 18:S153-S177. doi: 10.1111/jcpe.12675.

M.S. Tonetti, S. Paris, P. Bottenberg, **G. Conrads**, P. Eickholz, P. Heasman, M.-Ch. Huysmans, R. Lopez, Ph. Madianos, F. Müller, I. Needleman, B. Nyvad, Ph. Preshaw, I. Pretty, St. Renvert, F. Schwendicke, L. Trombelli, G.- J. van der Putten, J. Vannobergen, N. West, and A. Young

Dental caries and periodontal diseases in the ageing population: call to action to protect and enhance oral health and wellbeing as essential component of healthy aging. Consensus report of group 4 of the joint EFP/ORCA workshop on the boundaries between caries and periodontal diseases.

J Clin Periodontol. 2017 Mar;44 Suppl 18:S135-S144. doi: 10.1111/jcpe.12681.

Conrads G., S. Barth, M. Möckel, L. Lenz, M. van der Linden, and K. Henne

Streptococcus tigurinus is frequent among gtfR-negative S. oralis endocarditis-isolates and in oral samples of healthy adults but highly virulent strains are uncommon

Journal of Oral Microbiology, 2017 Apr 20;9(1):1307079.

Bergs Ch., L. Brück, R. R. Rosencrantz, **G. Conrads**, L. Elling, and A. Pich

Biofunctionalized zinc peroxide (ZnO₂) nanoparticles as active oxygen source and antibacterial agents

RSC Advances 2017, 7, 38998-39010.

2017 Meeting abstracts

Conrads G., S. Barth, M. Möckel, L. Lenz, M. van der Linden, and K. Henne (P, eP and V)

Streptococcus tigurinus is frequent among gtfR-negative *S. oralis* endocarditis-isolates and in oral samples of healthy adults but highly virulent strains are uncommon

5th. Joint Conference of the German Society for Hygiene and Microbiology (DGHM) and the Association for General and Applied Microbiology (VAAM).

In: BIOSpektrum Sonderausgabe 2017, ISSN 0947-0867, Seite 290-291
05-08 March 2017 in Würzburg, Germany.

Hetrodt, J. Lausch, H. Meyer-Lueckel, **G. Conrads** and C. Apel, (P and V).

Influence of Carolacton-containing composite materials on the development of secondary caries in vitro

In: Caries Research 2017

64th. ORCA Congress (The European Organisation for Caries Research), session 1: Microbiology

05.-06. 07. 2017 in Oslo, Norway

C. Walther, H. Meyer-Lueckel, **G. Conrads**, M. Esteves-Oliveira and **K. Henne** (P and V)

Correlation between relative bacterial activity and sucrose-related H⁺-concentration of *Lactobacillus paracasei* and *Fusobacterium nucleatum*

In Caries Research 2017

64th. ORCA Congress (The European Organisation for Caries Research), session 1: Microbiology

05.-06. 07. 2017 in Oslo, Norway

Die Arbeit hat zudem zum Gewinn des Oral-B-Preises, 2. Platz, 2017 geführt.

Kather, M., **M. Skischus**, P. Kandt, A. Pich*, S. Neuss-Stein and **G. Conrads** (V)

Functional isoeugenol-modified-nanogel coatings for implants

In: Journal of Oral Microbiology, 2017, Suppl. 1325239

12. European Oral Microbiology Workshop, 25.-28. May 2017 in Stockholm, Sweden.

M. Teichmann, K. Groß, M. Rückbeil, **G. Conrads**, S. Wolfart (P)

Einzelzahnimplantate mit Lithium-Disilikat-Suprakonstruktionen: Risikofaktoren für den bakteriellen Befall nach 1 Jahr in Funktion

In: 31. Kongress der Deutschen Gesellschaft für Implantologie

30.11.-02.12.2017 in Düsseldorf

Conrads, G (invited speaker)

Bioactive NanoCoat - Controlling biofilm by functional coatings

SFB 1027 seminar, invited by Prof. Hannig

20.06.2017 in Homburg

2016 Peer-reviewed publications

Functional isoeugenol modified-nanogel coatings for design of biointerfaces

Kather, M., M. Skischus, P. Kandt, A. Pich*, **G. Conrads***, S. Neuss-Stein*

***shared authorship**

Angewandte Chemie International Edition, Communication – accepted 11-2016

Gutknecht N., T. Sardar Al-Karadaghi, M. Abbood Al-Maliky, **G. Conrads**, and R. Franzen.

The effectiveness of 2780 nm and 940 nm laser irradiation on *Enterococcus faecalis* in bovine root dentin slices of different thicknesses.

Photomedicine and Laser Surgery, 34, 1 (2016)

Falkenstein S., J.M. Stein, K. Henne, and **G. Conrads**.

Trends in antibiotic use and microbial diagnostics in periodontal treatment: comparing surveys of German dentists in a ten-year period.

Clinical Oral Investigations, 20(8), 2203-2210 (2016).

Henne K., A-P Gunesch, C. Walther, H. Meyer-Lückel, **G. Conrads**, and M Esteves-Oliveira
Analysis of bacterial activity in sound and cariogenic biofilm. A pilot in vivo study
Caries research, 2016 Sep 6;50(5):480-488.

2016 Meeting abstracts

E. Lange, B. Melzer-Krick, K. Henne, and **G. Conrads (P)**
Testing an antioxidants-rich medium to grow oral anaerobes aerobically
In: Abstract book "2016 Anaerobe Nashville" PII-16 (page 155)
The 13th Biennial Congress of the Anaerobe Society of the Americas (ASA)
11.07.-14.07.2016 in Nashville, Tennessee, USA

J. Tyralla, K. Henne, S. Neuss-Stein, and G. Conrads (P and V).
Anti-SM monoclonal antibodies: production and applications
In Caries Research 2016; 50: page 10; DOI: 10.1159/000445087
63th. ORCA Congress (The European Organisation for Caries Research), session 1:
Microbiology
06.-09. 07. 2016 in Athens, Greek.

F. Hetrodt, J. Lausch, H. Meyer-Lueckel, C. Apel, and G. Conrads (P).
Model parameters for caries initiation adjacent to composite by a *Streptococcus mutans*
biofilm
In Caries Research 2016; 50: page 34; DOI: 10.1159/000445087
63th. ORCA Congress (The European Organisation for Caries Research), session 1:
Microbiology
06.-09. 07. 2016 in Athens, Greek.

Henne, K., Z. Shukoor, H. Meyer-Lückel, G. Conrads, und R.J. Wierichs (P)
Pilotstudie zum Effekt von (Alkali-)Metallfluoriden auf das Biofilm-Wachstum von
Streptococcus mutans und *Lactobacillus paracasei*
30. Jahrestg. der Deutschen Gesellschaft für Zahnerhaltung (DGZ), 06.-08.10.2016 in
Leipzig.

G. Conrads and H.-P. Horz (V)
Relationship between methanogenic archaea and subgingival microbial complexes in human
periodontitis.
The 13th Biennial Congress of the Anaerobe Society of the Americas
11.07.-14.07.2016 in Nashville, Tennessee, USA

Conrads, G (Invited speaker, faculty member)
Molecular genetic methods in diagnostics of anaerobes
ESCMID Postgraduate Technical Workshop: Anaerobic Bacteria: Next Generation
Sequencing Technology meets Anaerobic Diagnostics.
26.-28.09.2016 at the University Medical Center Groningen (UMCG), The Netherlands

Conrads, G AND 19 co-authors (invited as reviewer and expert immunology)
Working group 4: Age-related effects on oral health, dental caries and periodontal diseases
The boundaries between caries and periodontal diseases
XIII EFP Workshop jointly by ORCA
06.-09.11.2016 in Madrid (La Granja), Spain.

F. Hetrodt, J. Lausch, C. Apel, und G. Conrads (V)
Untersuchung der Sekundärkaries im Streptococcus-mutans-Biofilmmodell *in vitro*
48. Jahrestagung des Arbeitskreises Grundlagenforschung in der Zahnmedizin (AfG)
07.-08.01.2016 in Mainz

K. Henne, S. Kruth, J. M. Stein, und G. Conrads (V)

Campylobacter-Spezies Proportionen spiegeln die mikrobielle Gemeinschaft im Verlauf einer Parodontitis

48. Jahrestagung des Arbeitskreises Grundlagenforschung in der Zahnmedizin (AfG)
07.-08.01.2016 in Mainz

S. Falkenstein, J. Stein, k. Henne, and G. Conrads (P).

Mikrobiologische Diagnostik und Antibiotikaeinsatz in der Parodontitistherapie - eine Umfrage unter deutschen Zahnärzten.

DG PARO Jahrestagung 2016, 15.-17.09.2016 in Würzburg

2015 Peer-reviewed publications

Conrads G. Oral Anaerobes in Health and Disease.

Anaerobe. 2015 Oct;35(Pt A):1-2. (2015).

Horz H.P., N. Robertz, M.E. Vianna, K. Henne, and **G. Conrads.**

Relationship between methanogenic archaea and subgingival microbial complexes in human periodontitis.

Anaerobe. 2015 Oct;35(Pt A):10-2. (2015).

Henne K., A. Rheinberg, B. Melzer-Krick, and **G. Conrads.**

Aciduric microbial taxa including *Scardovia wiggisiae* and *Bifidobacterium* spp. in caries and caries free subjects.

Anaerobe. 2015 Oct;35(Pt A):60-5. (2015).

E. Könönen, **G. Conrads**, and E. Nagy

Bacteroides, *Porphyromonas*, *Prevotella*, *Fusobacteria*, and other anaerobic Gram-negative rods

Bookchapter in: Manual of Clinical Microbiology, Edition 11, section II, chapter 54, pages 967-993 (26 Seiten), (June 2015).

2015 Meeting abstracts

K. Henne, A. Gunesch, M. Esteves-Oliveira, C. Walther, and G. Conrads (P).

Metabolic activity of selected acidogenic bacteria reflects caries activity

In: International Journal of Medical Microbiology.

67. Jahrestg. der Deutschen Gesellschaft für Hygiene und Mikrobiologie (DGHM), 27.-30.09.2015 in Münster.

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