Jonathon L. Baker, Ph.D.

Assistant Professor
Division of Biomaterial & Biomedical Sciences
Department of Oral Rehabilitation & Biosciences
OHSU School of Dentistry
Oregon Health & Science University

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GitHub: jonbakerlab
Twitter: @jonbakerlab

Summary (full CV follows):

-Research Experience: total of 16 years of experience in microbiology, virology, immunology, molecular biology, biochemistry, and bioinformatics research

-Leadership Experience: 7 years of experience as a Principal Investigator, leading diverse research teams on projects elucidating novel biosynthetic pathways and taxa in the human microbiome

-Grantsmanship/Fundraising: over $1.3 million in funding awarded as Principal Investigator, a further $1.4 million awarded as Co-Investigator; funded continuously by NIH since 2013

-Communication/Publications: 34 peer-reviewed publications in high-impact journals (*e.g. Nature Reviews Microbiology, PNAS, Genome Research, mBio, mSystems, Trends in Microbiology*), including 26 as first and/or corresponding author; 33 invited/public presentations with an international reach; multiple publications and presentations have won awards

-Experience in academic (Univ. of Rochester, UCLA, UCSD, OHSU)**, nonprofit** (JCVI)**, industry** (Pfizer)**, and biotech** (Kean Health) **settings**

Education:

University of Rochester Medical Center — **Rochester, NY**
Ph.D.- Microbiology & Immunology — *March 2016*
M.S.- Microbiology & Immunology — *September 2014*

SUNY Geneseo — **Geneseo, NY**
B.S.- Biology — *May 2008*

Professional Experience:

2023-present	**Assistant Professor,** Oregon Health & Science University
2021-2023	**Visiting Scientist**, Victor Nizet, M.D. Lab, UCSD School of Medicine
2020-2023	**Staff Scientist**, J. Craig Venter Institute (JCVI)
2017-2020	**Ruth L. Kirschstein NRSA Fellow**, Karen Nelson, Ph.D. and Anna Edlund, Ph.D. Labs, JCVI
2018-2019	**Expert Consultant/Science Writer**, Kean Health, Inc.
2016-2017	**Ruth L. Kirschstein NRSA Fellow**, Wenyuan Shi, Ph.D. Lab, UCLA School of Dentistry
2016	**Visiting Associate Scientist**, Vaccine Research & Development Group, Pfizer, Inc.
2013-2016	**Graduate Student**, Robert Quivey, Ph.D. Lab, University of Rochester Medical Center
2012	**Graduate Student**, Baek Kim, Ph.D. Lab, University of Rochester Medical Center

Jonathon L. Baker, Ph.D.

2009-2012 **Graduate Student**, Brian Ward, Ph.D. Lab, University of Rochester Medical Center
2008-2012 **Technician,** Brian Ward, Ph.D. Lab, University of Rochester Medical Center

Current Funding Support:

NIH/NIDCR **K99/R00-DE029228** 07/01/2020-06/30/2026
"Investigating membrane alterations as a mechanism of acid tolerance in cariogenic bacteria"
Role: PI Total Cost: $1,143,866

Research Council of Norway **INTPART-322375** 2022-2026
"Norway-India-Brazil-Canada-USA: Partnership for excellence in education, research, and innovation in biofilm and antibiotic resistance (RESISFORCE)"
Role: Co-I (PI: Fernanda Petersen, University of Oslo) Total Cost: $1,195,540

Completed Funding Support:

Research Council of Norway **INTPART-274867** 2018-2022
"Enhancing world-class research and education in biofilm and antibiotic resistance by strengthening cooperation between Norway-Brazil-USA (RESISPART)"
Role: Co-I (PI: Fernanda Petersen, University of Oslo) Total Cost: $531,785

NIH/NIDCR **F32-DE026947** 5/1/17-6/30/2020
"Understanding *Streptococcus mutans* pathogenesis in a social and ecological setting"
Role: PI Total Cost: $168,414

NIH/Office of the Director **DP5-OD020315** 9/18/14-8/31/16
"URBEST: The University of Rochester BEST Training Program"
Role: Trainee

NIH/NIDCR **T90-DE021985** 8/1/13-4/1/16
"Training program in oral science"
Role: Trainee

Publications (reverse chronological order; *denotes publication of particular interest; #denotes pending):

#36. Bjånes, E., Stream, A., Gibson, P.S., Bravo., A.M., Dahesh, S., **Baker, J.L.,** Varble, A., Nizet, V., Veening, J.W. An efficient *in vivo*-inducible CRISPR interference system for group A *Streptococcus* genetic analysis and pathogenesis studies. **Manuscript in submission.** Preprint available upon request.

#35. Liu, J., Spencer, N., Utter, D.R., Grossman, A., Santos, N.C.D., Shi, W., **Baker, J.L.,** Hasturk, H., He, X., Bor, B. Persistent enrichment of Klebsiella in oral and nasal microbiome community under long-term starvation. **Manuscript in submission.** Preprint available upon request.

#34. Hirose, Y., Zielenski, D.C., Poudel, S., Rychel, K., **Baker, J.L.,** Toya, Y., Heinken, A., Thiele, I., Kawabata, S., Palsson, B.O., Nizet, V. iYH543, a genome-scale model of a *Streptococcus pyogenes* serotype M1 strain. **Manuscript in submission.** Preprint available upon request.

33. Brar, N.K., Dhariwal, A., Åmdal, H.A., Junges, R., Salvadori, G., **Baker, J.L.**, Edlund, A., Petersen, F.C. Exploring ex vivo biofilm dynamics: consequences of low ampicillin concentrations on the human oral microbiome. **npj Biofilms and Microbiomes.** 2024 April 2; 10:37; doi:10.1038/s41522-024-00507-7

32. **Baker, J.L.** The Baker Lab at the OHSU School of Dentistry: leveraging bioinformatics and molecular biology to discover how the bacteria that live in our mouth impact human health and disease. **OHSU School of Dentistry Anthology.** 2023 December 19; 1(1): 3-11; doi: 10.6083/bpxhc42395

31. **Baker, J.L.,** Mark Welch, J.L., Kauffman, K., McLean, J.S., He, X. The oral microbiome: diversity, biogeography and human health. **Nature Reviews Microbiology.** 2023 September 12; doi:10.1038/s41579-023-00963-6

30. **Baker, J.L.** Illuminating the oral microbiome and its host interactions: recent advancements in omics and bioinformatics technologies in the context of oral microbiome research. **FEMS Microbiology Reviews.** 2023 September 4; doi: 10.1093/femsre/fuad051

*29. **Baker, J.L.** Using nanopore sequencing to obtain complete genomes from saliva samples. **mSystems**. 2022 Aug 22:e0049122. doi: 10.1128/msystems.00491-22.

28. **Baker, J.L.,** Tang, X., LaBonte, S., Uranga, C., Edlund, A. *mucG, mucH,* and *mucI* modulate production of mutanocyclin and reutericyclins in *Streptococcus mutans* B04Sm5. **Journal of Bacteriology.** 2022 April 11; doi: 10.1128/jb.00042-22

27. **Baker, J.L.** Complete genome sequence of Candidatus Nanosynbacter strain HMT-348_TM7c-JB, a member of *Saccharibacteria* Clade G1. **Microbiology Resource Announcements.** 2022 April 11; doi: 10.1128/mra.00023-22

*26. Tinder, E.L., Faustoferri, R.C., Buckley, A.A., Quivey, Jr., R.G., **Baker, J.L.** Analysis of the *Streptococcus mutans* proteome during acid and oxidative stress reveals modules of co-expression and an expanded role for the TreR transcriptional regulator. **mSystems.** 2022 March 15; doi: 10.1128/msystems.01272-21

25. Uranga, C., Nelson, K.E., Edlund, A., **Baker, J.L.** Tetramic acids mutanocyclin and reutericyclin-A, produced by *Streptococcus mutans* strain B04Sm5, modulate the ecology of an in vitro oral biofilm. **Frontiers in Oral Health.** 2022 January 6; 2:796140; doi: 10.3389/froh.2021796140

24. Silveira, C.B., Cobian-Guemes, A.G., Uranga, C., **Baker, J.L.,** Edlund, A., Rohwer, F., Conrad, D. Multi-omics study of keystone bacterial species in a cystic fibrosis lung microbiome. **International Journal of Molecular Sciences.** 2021 November 7; 22, 12050; doi: 10.3390/ijms222112050

23. **Baker, J.L.** Complete genomes of clade G6 *Saccharibacteria* suggest a divergent ecological niche and lifestyle. **mSphere.** 2021 Aug 11; e00530-21. doi: https://doi.org/10.1128/mSphere.00530-21

22. **Baker, J.L.** A complete genome sequence of strain JB001, a member of *Saccharibacteria* clade G6 ("Ca. Nanogingivalaceae"). **Microbiology Resource Announcements.** 2021 Jun;10(23):e0051721 doi: 10.1128/MRA.00517-21

*21. **Baker, J.L.,** Morton, J.T., Dinis, M., Alvarez, R., Tran, N.C., Knight, R., Edlund, A. Deep metagenomic sequencing examines the oral microbiome during dental caries, revealing novel taxa and co-occurrences with host molecules. **Genome Research.** 2021 January; 31(1):64-74. doi: 10.1101/gr.265645.120

20. **Baker, J.L.,** Edlund, A. Identification of bacterial biosynthetic gene clusters associated with caries. *In* Adami, G., (ed), **The Oral Microbiome: Methods and Protocols.** Springer Science+Business Media, LLC. 2021. IBSN: 978-1-0716-1517-1

19. **Baker, J.L.,** Edlund, A. Composite long- and short-read sequencing delivers a complete genome sequence of B04Sm5, a reutericyclin- and mutanocyclin-producing strain of *Streptococcus mutans.* **Microbiology Resource Announcements.** 2020 Nov; 9:e01067-20. doi:10.1128/MRA.01067-20

18. Momeni, S., Beno, S., **Baker, J.L.,** Edlund, A., Ghazal, T., Wu, H., Childers, N.K. Caries-associated biosynthetic gene clusters of *Streptococcus mutans.* **Journal of Dental Research.** 2020 July; 99(8):969-976; doi:10.1177/0022034520914519

17. Yang, Y., Shen, W., Zhong, Q., He, X., **Baker, J.L.,** Xiong, K., Jin, X., Wang, J., Hu, F., Le, S. Development of a bacteriophage cocktail to constrain the emergence of phage-resistant *Pseudomonas aeruginosa.* **Frontiers in Microbiology.** 2020 March 4; 11:327; doi:10.339/fmicb.2020.00327

16. **Baker, J.L.,** Saputo, S., Faustoferri, R., Quivey Jr., R.G. *Streptococcus mutans* SpxA2 relays the signal of cell envelope stress from LiaR to effectors that maintain cell wall and membrane homeostasis. **Molecular Oral Microbiology.** 2020 June; 35(3): 118-128; doi:10.1111/omi.12282

*15. Tang, X., Kudo, Y., **Baker, J.L.,** LaBonte, S., Jordan, P.A., Huan, T., KcKinnie, S.M.K., Guo, J., Huan, T., Moore, B.S., Edlund, A. Cariogenic *Streptococcus mutans* produces tetramic acid strain-specific antibiotics that impair commensal colonization. **ACS Infectious Diseases.** 2020 April; 6(4):563-571; doi:10.1021/acsinfecdis.9b00365

*Co-first author

**Subject of spotlight article in* Chemical & Engineering News
https://cen.acs.org/pharmaceuticals/antibiotics/Bacteria-behind-tooth-decay-make/98/web/2020/01

*14. **Baker, J.L.,** Hendrickson, E.L., Tang, X., Lux, R., He, X., Edlund, A., McLean, J.S., Shi, W. *Klebsiella* and *Providencia* emerge as lone survivors following long-term starvation of the oral microbiota. **PNAS**. 2019 April 23; 116(17):8499-8504; doi: https://doi.org/10.1073/pnas.1820594116

**Subject of press releases from JCVI, the Forsyth Institute, and the University of Washington*
https://www.forsyth.org/news/an-experimental-battle-royale-of-oral-bacteria-helps-explain-how-a-pathogen-causes-hospital-infections-2/

**Reccomended as being of special significance by Faculty of 1000Prime.*
https://f1000.com/prime/735541010

*13. Aleti, G., **Baker, J.L.,** Tang, X., Alvarez, R., Denis, M., Tran, N.C., Melnik, A.V., Zhong, C., Ernst, M., Dorrestein, P.C., Edlund, A. Identification of the biosynthetic gene clusters of the oral microbiome illuminates the unexplored social language of bacteria during health and disease. **mBio**. 2019 April 16;doi: https://doi.org/10.1128/mBio.00321-19

12. **Baker, J.L.,** He, X., Shi, W. Precision reengineering of the oral microbiome for caries management. **Advances in Dental Research**. 2019 October 21; 30(2), 34-39; doi: https://doi.org/10.1177/0022034519877386

11. **Baker, J.L.,** Edlund, A. Exploiting the oral microbiome to prevent tooth decay: has evolution already provided the best tools? **Frontiers in Microbiology**. 2019 Jan 11; 9:3323; doi: 10.3389/fmicb2018.03323

10. **Baker, J.L.,** Lindsay, E.L., Faustoferri, R.C., To, T.T., Hendrickson, E.L., He, X., Shi, W., McLean, J.S., Quivey Jr., R.G. Characterization of the trehalose utilization operon in *Streptococcus mutans* reveals that the TreR transcriptional regulator is involved in stress response pathways and toxin production. **Journal of Bacteriology**. 2018 May 24;200(12): pii: JB.00057-18. doi: 10.1128/JB.00057-18.

9. **Baker, J.L.,** Bor, B., Agnello, M., Shi, W., He, X. Ecology of the oral microbiome: beyond bacteria. **Trends in Microbiology**. 2017 May; 25(5): 362-374. doi: 10.1016/j.tim.2016.12.012

8. **Baker, J.L.,** Faustoferri, R.C., Quivey, Jr., R.G. Acid-adaptive mechanisms of *Streptococcus mutans*—the more we know, the more we don't**. Molecular Oral Microbiology**. 2017 Apr; 32(2): 107-117. doi: 10.1111/omi.12162

7. **Baker, J.L.,** Faustoferri, R.C., Quivey, Jr., R.G. A modified chromogenic assay for determination of free intracellular NAD+/NADH in *Streptococcus mutans.* **Bio-Protocol**. 2016 Aug; 6(16). Pii: e1902. doi: 10.21769/BioProtoc.1902.

6. Faustoferri, R.C., Santiago, B., **Baker, J.L.**, Cross, B., Xiao, J., Quivey Jr., R.G. Acid adaptive responses of *S. mutans,* and mechanisms of integration with oxidative stress. *In* de Bruijn, F. (ed), **Stress and Environmental Control of Gene Expression in Bacteria, 1st Edition**. John Wiley & Sons, Inc. 2016 Aug; ISBN: 9781119004882

*5. **Baker, J.L.**, Derr, A.D., Faustoferri, R.C., Quivey Jr., R.G., Loss of NADH oxidase activity in *Streptococcus mutans* leads to Rex-mediated overcompensation of NAD^+ regeneration by lactate dehydrogenase. **Journal of Bacteriology**. 2015 Dec; 197(23):3645-57. doi: 10.1128/JB.00383-15.

**Selected for Spotlight Feature by the Journal of Bacteriology editor*
https://jb.asm.org/content/197/23/3625

4. **Baker, J.L.**, Abranches, J.A., Faustoferri, R.C., Hubbard, C.J., Lemos, J.A., Courtney, M.A., Quivey Jr., R.G. Transcriptional profile of glucose-shocked and acid-adapted strains of *Streptococcus mutans.* **Molecular Oral Microbiology**. 2015 Dec; 30(6):496-517.

3. **Baker, J.L.,** Derr, A.M., Karuppiah, K., MacGilvray, M.E., Kajfasz, J.K., Faustoferri, R.C., Rivera-Ramos, I., Bitoun, J.P., Lemos, J.A., Wen, Z.T., Quivey Jr., R.G. *Streptococcus mutans* NADH oxidase lies at the intersection of overlapping regulons controlled by oxygen and NAD^+ Levels. **Journal of Bacteriology**. 2014 June; 196(12):2166-2177.

2. **Baker, J.L.**, Ward, B.M. Development and comparison of a quantitative TaqMan-MGB real-time PCR assay to three other methods of quantifying vaccinia virions**.** **Journal of Virological Methods**. 2014. 196:126-132.

*1. Hollenbaugh,,J.A., Gee, P., **Baker, J.**, Daly, M.B., Amie, S.M., Tate, J., Kasai, N., Kanemura, Y., Kim, D., Ward, B.M., Koyanagi, Y., Kim, B. 2013. Host Factor SAMHD1 Restricts DNA Viruses in Non-Dividing Myeloid Cells. **PLOS Pathogens**. 9(6) e1003481.

**Selected for PLoS Pathogens 10 Year Anniversary Collection*
https://collections.plos.org/pathogens-10th-anniversary

Presentations:

33. **2024** IADR General Session **New Orleans, LA**
Unsaturated fatty acids impact physiology & virulence of streptococci

32. **2024** OHSU School of Dentistry Research Day **Portland, OR**
Unsaturated fatty acids impact physiology & virulence of streptococci

31. **2024** 23rd Annual Mark Wilson Conference **Cabo San Lucas, BCS, Mexico**
Unsaturated fatty acids impact physiology & virulence of streptococci

30. **2023** Joint 6th RESISPART/RESISFORCE and NORSE Meeting **Oslo, Norway**
Unsaturated fatty acid biosynthesis: a useful antimicrobial target for Gram positive pathogens?

29. **2023** OHSU Bacteriology Research Group **Portland, OR**
Unsaturated fatty acids impact physiology & virulence of streptococci

28. **2023** OHSU Meet the Mentor **Portland, OR**
The Baker Lab: Using microbiology & bioinformatics to discover of the oral microbiome impacts health & disease

27. **2023** NIDCR Trainee Research Presentation **Portland, OR**
Unsaturated fatty acids mediate stress tolerance in Lactobacillales

26. **2023** AADOCR 2023 Annual Meeting **Portland, OR**
Unsaturated fatty acids mediate stress tolerance in Lactobacillales

25. **2023** 7th Annual Mini Symposium for Young Investigators **Portland, OR**
Changes in the membrane fatty acid composition protect Streptococci from stress

24. **2022** 1st RESISFORCE Symposium **Piracicaba, SP, Brazil**
Using bioinformatics to understand ecology and pathogenesis of the oral microbiota

23. **2022** Biology of the Interplay of Host and Microbiome Early Career Seminar Series (Baylor College of Medicine seminar series) **Virtual/Online**
Using bioinformatics to understand ecology and pathogenesis of the oral microbiota

22. **2022** Institute of Oral Biology, University of Oslo **Oslo, Norway**
Obtaining complete bacterial genomes from saliva samples using nanopore sequencing

21. **2022** Let's Talk Microbiomes (University of Oslo seminar series) **Oslo, Norway**
Using bioinformatics to understand ecology and pathogenesis of the oral microbiota

20. **2022** PER-IADR Oral Health Research Congress **Marseille, France**
Antimicrobial resistance: off-target effects of antibiotics, new approaches and educational challenges (Session Chair)

19. **2022** Streptococcal Biology Gordon Research Conference **Newry, ME**
Unsaturated fatty acids mediate stress tolerance in Lactobacillales

18. **2022** Dean's Seminar, Oregon Health and Sciences University **Portland, OR**
Using bioinformatics to understand ecology and pathogenesis in the oral microbiome

17. **2022** 21st Annual Mark Wilson Conference **San Juan, Puerto Rico**
Unsaturated fatty acids protect Streptococci from environmental stress

16. **2021** Oral Microbiome: Beyond Bacteria Symposium **Cambridge, MA**
Complete genomes of clade G6 Saccharibacteria suggest a divergent ecological niche and lifestyle

15. **2021** CED-IADR / NOF Oral Health Research Congress **Brussels, Belgium**
Clade G6 Saccharibacteria ("Ca. Nanogingivalaceae") are highly divergent from Clade G1

14. **2021** IADR General Session **Virtual/Online**
Complete genomes of clade G6 Saccharibacteria suggest a divergent ecological niche and lifestyle

13. **2021** 6th Mini-Symposium for Young Investigators at IADR **Virtual/Online**
Complete genomes of clade G6 Saccharibacteria suggest a divergent ecological niche and lifestyle

12. **2021** NIDCR Trainee Research Presentation **Virtual/Online**
Complete genomes of clade G6 Saccharibacteria suggest a divergent ecological niche and lifestyle

11. **2021** 20th Annual Mark Wilson Conference **Virtual/Online**
Using Nanopore sequencing to improve genome assembly for oral bacteria

10. **2019** 2nd RESISPART Symposium **Piracicaba, SP, Brazil**
Exploiting the oral microbiome to prevent tooth decay: has evolution already provided the best tools?

9. **2019** AADR/JCVI Fall Focused Symposium **San Diego, CA**
The oral microbiome and its relationship with the salivary immunome during advanced dental caries, illustrated by metagenomic sequencing and compositional analysis

8. **2019** JCVI Work in Progress Spotlight (WIPS) Seminar **San Diego, CA**
Reference frames and microbe-metabolite vectors: tools designed to handle the compositional data provided by sequencing

7. **2019** IADR General Session **Vancouver, BC, Canada**
Integrating metagenomics and immunology to examine oral ecology in dental caries

6. **2019** NIDCR Trainee Research Presentation **Vancouver, BC, Canada**
Social and ecological interactions in the oral microbiota

5. **2019** 4th Mini-Symposium for Young Investigators at IADR **Vancouver, BC, Canada**
Streptococcus mutans pathogenesis in a social and ecological setting

**Received Paula Fives-Taylor, Ph.D. Award for Best Presentation Award-Postdoc*

4. **2018** Broadening Experiences in Scientific Training Retreat **Rochester, NY**
Academia, industry, or non-profit? One Alumnus' pros and cons list after doing all 3

3. **2018** Skaggs School of Pharmacy, UC San Diego **San Diego, CA**
The salivary microbiome: competition and pathogenesis

2. **2017** ASM Microbe 2017 **New Orleans, LA**
Characterization of the trehalose utilization operon in *Streptococcus mutans* indicates an expanded role for the TreR transcriptional regulator.

1. **2015** AADR Section Meeting **Rochester, NY**
Streptococcus mutans lactate dehydrogenase overcompensates for loss of NADH oxidase.

Honors and Awards:

2023 Top Performing Reviewer, mSystems

2022 Top Performing Reviewer, mSphere

2019 "*Streptococcus mutans* pathogenesis in a social and ecological setting" awarded Paula Fives-Taylor, Ph.D. Award for Best Presentation at the 2019 IADR Young Investigator Mini-Symposium

2019 **"***Klebsiella* and *Providencia* emerge as lone survivors following long-term starvation of the oral microbiota" article was recommended by F1000Prime as being of special significance.

2016 University of Rochester Broadening Experiences in Scientific Training (URBEST) Internship Awardee (Pfizer, Inc.)

2015 Editor's Spotlight: Journal of Bacteriology. **"**Loss of NADH oxidase activity in *Streptococcus mutans* leads to Rex-mediated overcompensation of NAD^+ regeneration by lactate dehydrogenase" article selected by the editor as one of significant interest.

2015 PLOS Pathogens 10 Year Anniversary Collection. **"**Host Factor SAMHD1 Restricts DNA Viruses in Non-Dividing Myeloid Cells" article selected as one of the 12 most significant virology articles published in PLOS Pathogens during the 10 years since the journal's inception.

2007-2008 Dean's Honor List, State University of New York: College at Geneseo

2004 SUNY Geneseo Notebook Computer Annual Scholarship

Professional Affiliations:

2018-present RESISFORCE: Norway-India-Brazil-Canada-USA; Partnership for excellence in education, research, and innovation in biofilm and antibiotic resistance
2017- present American Society for Microbiology (ASM)
2015- present International Association for Dental Research (IADR)
2015- present American Association for Dental & Craniofacial Research (AADOCR)
2015- 2016 American Society for Cell Biology (ACSB)
2014- present University of Rochester Broadening Experiences in Scientific Training (URBEST) Program

Editorial & Review Service:

2023 Special Collection Editor
"Microbiome modulators and oral health"; Special Collection, *Journal of Oral Microbiology*

2023-present Grant Reviewer
Wellcome Trust, Early Career Award

2022-present Editorial Board
Journal of Oral Microbiology

2022-present Review Editor
Frontiers in Microbiology

2019-present Peer Reviewer
Microbiology Spectrum (14), *Molecular Oral Microbiology* (5), *mSystems* (6), *mSphere* (4), *Journal of Bacteriology* (3), *Microorganisms* (3). *npj Biofilms and Microbiomes* (5), *BMC Oral Health* (3), *FEMS Microbial Ecology* (2), *Frontiers in Cellular and Infection Microbiology* (2), *Frontiers in Microbiology* (2), *Journal of Dental Research* (2), *Antibiotics* (1), *Applied Sciences* (1), *Caries Research* (1) *Critical Reviews in Microbiology* (1), *Frontiers in Oral Health* (1), *Journal of Oral Microbiology* (3), *Molecular Microbiology* (1), *Communications Medicine* (1), *Microbiology Open* (1), Nucleic Acids Research (1)

Verified reviews on Publons: ***https://publons.com/researcher/3290369/jonathon-l-baker/***

Jonathon L. Baker, Ph.D.

Mentoring and Teaching Experience:

Trainees	**Current Position**
Research Assistant:	
Jonah Tang (2023-present)	Research Assistant, OHSU
Postdoctorate:	
Carla Uranga, Ph.D. (2020-2021)	Visiting Scientist, J. Craig Venter Institute
Visiting Scientist:	
Stephanie Momeni, Ph.D. (2018)	Assistant Professor, Oregon Health and Sciences University
Post-baccalaureate:	
Pablo Arroyo, M.S. (2019)	Senior Research Associate, Crinetics Pharmaceuticals
Sandra LaBonte (2019)	Graduate Student, Texas A&M University
Undergraduate:	
Devki Shah (2019)	Undergraduate, UC San Diego

Teaching Experience

2024-present Co-Director, MB721 Microbiology & Immunology, OHSU School of Dentistry

2024-present Co-Director, MB722 Pathogenic & Oral Microbiology, OHSU School of Dentistry

2024-present Lecturer, OPTH 725 Caries, OHSU School of Dentistry

2023 Co-facilitator, RESISFORCE Problem-Based Learning Symposium.

2023 Instructor, RESISFORCE Bioinformatics Workshop.

2022 Co-facilitator, RESISFORCE Problem-Based Learning Symposium.

2022 Co-facilitator, RESISFORCE Bioinformatics Workshop.

2022 Instructor, Exploring the Landscape of Antibiotic Resistance in Microbiomes, a massive open online course (MOOC) https://www.futurelearn.com/courses/exploring-the-landscape-of-antibiotic-resistance-in-microbiomes

2019 Co-facilitator, RESISPART Introduction to Bioinformatics Workshop.

2019 Instructor, Bioinformatics workshop: "Compositional microbiome data and novel tools to analyze it"

2014 Teaching Assistant, University of Rochester Medical Center: Immunology (MBI 473).

Jonathon L. Baker, Ph.D.

References (current contact information is available upon request, if not publicly available):

Hui Wu, Ph.D.
Associate Dean for Research
Weight Endowed Professor in Research
OHSU School of Dentistry

Carmem Pfeifer, D.D.S., Ph.D.
Division Head, Biomaterial and Biomedical Sciences
Weight Professor of Restorative Dentistry
OHSU School of Dentistry

Victor Nizet, M.D.
Professor and Vice Chair for Basic Research, Department of Pediatrics
Chief, Division of Host-Microbe Systems & Therapeutics
UC San Diego School of Medicine
Professor, Skaggs School of Pharmacy & Pharmaceutical Sciences

Robert G. Quivey, Jr., Ph.D. (retired 05/2021, listed are titles at retirement and current contact information)
Director & Margaret and Cy Welcher Professor, Center for Oral Biology
Associate Director for Research, Eastman Institute of Oral Health
Dean's Professor of Microbiology & Immunology
University of Rochester Medical Center

Wenyuan Shi, Ph.D.
Chief Executive Officer & Chief Scientific Officer
The Forsyth Institute

Karen E. Nelson, Ph.D.
Chief Scientific Officer
Thermo Fisher Scientific

Anna Edlund, Ph.D.
Chief Scientific Officer
Oath Life Systems, Inc.
Co-founder, MIX Research Sweden
Adjunct Assistant Professor, Department of Pediatrics
UC San Diego School of Medicine

Paul Liberator, Ph.D.
Director, Vaccine Research & Early Development
Pfizer, Inc.

Brian M. Ward, Ph.D.
Associate Professor
Department of Microbiology & Immunology
University of Rochester Medical Center