

CURRICULUM VITAE

Joerg Graf

Contact Information:

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Employment and Appointments:

<u>Institution</u>	<u>Position</u>	<u>Dates</u>
Pacific Biosciences Research Center University of Hawaii Manoa Honolulu, HI	Researcher	2023 - present
Dept. of Molecular and Cell Biology University of Connecticut Storrs, CT	gratis Professor Professor Associate Dept. Head Director of PSM in Microbial Systems Analysis	2023 - present 2014- 2023 2012 - 2022 2009 - 2023
Inst. for Infectious Diseases University of Berne Berne, Switzerland	Group Leader Bio-Safety Officer	1996 - 2001 1998 - 2001

Broad Institute, Cambridge, MA Visiting Scientist 2010 – 2012

Education:

<u>Institution</u>	<u>Field of Study</u>	<u>Dates and Degree</u>
University of Southern California Los Angeles, CA	Biology Advisor: Ned Ruby	1989 - 1995 Ph.D. 1995
Baylor University Waco, TX	Biology	1985 - 1989 B.S. 1989

Summary Statement:

Dr. Graf leads a highly collaborative research team and performed key roles in establishing two model systems for studying the interaction of beneficial bacteria and animals. He published 80 peer-reviewed manuscripts. In addition, he participated actively in promoting symbiosis and microbiome research by organizing conferences, establish a core facility, interacting with the media, testifying before state legislature and being active in professional societies.

Awards, Fellowships and Honors:

Faculty Mentoring of Graduate Students Award by CLAS (2022)
Fellow in the American Academy of Microbiology (2019 – present)

American Society for Microbiology, Counsel of Microbial Sciences (2019-2020)
American Society for Microbiology, Counselor, Chair and Chair-Elect of Division I: General Microbiology (2011-14)
International Symbiosis Society: Vice president (2009 – 12)
Career Award National Science Foundation (2005)
Dissertation Fellowship, U. S. C. (1995)
Outstanding Teaching Assistant Award, U. S. C. (1995)
Student Travel Award, Am. Soc. Microbiol. (1994)
All University Merit Fellow, U. S. C. (1989 - 1992)
Texas Academy of Sciences, Best Student Paper (1989)

Extramural Funding:

Current Funding:

USDA ARS: Improving Salmonid Health through Breeding, Vaccination and Microbiome Modulation. Duration 8/20-7/25.
NIH: R61/R33 Identifying Biomarker Signatures on Prognostic Value or Multisystem Inflammatory Syndrome in Children (MIS-C), 1/1/2021 -11/30/2024, PI: Lynes, University of Connecticut. Subaward Graf

Completed Funding:

NIH: R01 Mechanisms of obesity and its metabolic complications in youth, PI: Nicola Santoro, Yale University. Duration 4/01/18 – 3/31/23. Subaward Graf.
NSF:EAGER Establishment of an Experimental Evolution System for Probiotic Bacteria. Duration 8/01/17 – 7/31/21.
NSF:BIO:MCB: Understanding Horizontal Gene Transfer in Bacteria and Archaea: Units of Transfer and Modes of Integration (P.I. M. Bansal). Duration 8/16-7/20.
USDA: Genomic characterization of bacterial-host-environmental interactions leading to the disease state. Duration 7/15-8/20.
NSF: BIGDATA: F: DKA: DKM: Novel Out-of-core and Parallel Algorithms for Processing Biological Big Data (P.I. Rajasekaran). Duration 1/15-12/19.
DHHS/NIH/National Institute of Nursing Research Nursing Instruction and Research: Multi-Omnics Analysis of Pain/Stress Impact on Neurodevelopment in Preterm Infants (P.I. Cong). Duration: 07/01/17 - 06/30/21.
USDA: Establishment Of Genomic Tools For Investigating Fish Pathogens 8/14-7/16.
EFRI-MIKS: Creation and Manipulation Of An Artificial Termite Gut Through Control Of The Microenvironment. NSF. P.I. R. Srivastava. Duration: 9/11 to 8/16.
R01: Functional Analysis of a Digestive-Tract Microbiome During Dietary Changes. PHS/NIH/NIGMS. P.I. J. Graf. Duration: 12/10 to 11/15.
Burroughs Wellcome Fund: 4th Beneficial Microbes Conference. Awardee Institution: American Society for Microbiology. Duration: 8/12 to 4/13.
NSF: 4th Beneficial Microbes Conference. Awardee Institution: American Society for Microbiology. Duration: 8/12 to 8/13.
NIH: 4th ASM Conference on Beneficial Microbes. Awardee Institution: American Society for Microbiology. Duration: 9/12 to 9/13.
CAREER: Establishment of *Hirudo medicinalis* as a model for digestive-tract symbioses. National Science Foundation. P.I. J. Graf. Duration: 6/05 - 5/11.

- CAREER Equipment supplement: Establishment of *Hirudo medicinalis* as a model for digestive-tract symbioses. National Science Foundation. P.I. J. Graf. Duration: 6/07 - 5/08.
- CAREER REU supplement: Establishment of *Hirudo medicinalis* as a model for digestive-tract symbioses. National Science Foundation. P.I. J. Graf. Duration: 6/06 to 5/07.
- SGER: Characterization of the microbial community of *Hirudo medicinalis*. National Science Foundation. P.I. J. Graf. Duration: 10/03 - 9/05.
- The exclusive symbiosis of *Aeromonas* and the medicinal leech: an opportunity to determine the symbionts function and genes essential for symbiotic competence. Swiss National Science Foundation. Duration: 4/2001 – 3/2004).
- Undergraduate extramural research grants:
- Bacteriophage and Their Role in Genetic and Ecological Dynamics of the Microbial Community within *Hirudo verbana*. American Society for Microbiology Undergraduate Research fellowship. P.I. J. Graf. Recipient: Mary Oukwu. Duration: 5/11 – 6/12. .
- Insights from *Aeromonas veronii* biofilm mutant studies into colonization of digestive tracts. American Society for Microbiology Undergraduate Research fellowship. P.I. J. Graf. Recipient: Chadene Zack. Duration: 5/07 – 6/08.
- Characterization of digestive-tract microbiota. American Society for Microbiology Undergraduate Research fellowship. P.I. J. Graf. Recipient: Alison Laufer. Duration: 5/04 – 6/05.

Intramural Funding:

Completed funding:

- Biodiversity Gradients of Symbiotic Bacterial Communities in Tropical Gastropods. P.I. Willig. Duration 12/31/2018 – 12/31/2020.
- Variation in the Composition and Structure of Microbiomes of Tropical Bats: Multiple Dimensions of Biodiversity in Complex Symbiotic Systems. P.I. Willig. Duration 6/1/2017 – 5/30/2018.
- Early Life Experience Imprints Gut Microbiome in Preterm Infants. PI. Cong. Duration 9/13 -8/18.
- Provost Award: UConn Microbiome Initiative P.I. Graf: Duration 07/1/17-6/30/2021.
- Establishment of high-throughput DNA sequencing for genomic, metagenomic and transcriptome studies. P.I. Graf. Duration: 1/09 – 12/09.
- Importance of Type-three secreted toxins in symbiosis. University of Connecticut Research Foundation. P.I. Graf. Duration: 1/06 - 12/07.
- Identification of antimicrobial compounds in *Hirudo medicinalis*. University of Connecticut Research Foundation. P.I. Graf. Duration: 1/03 - 12/03.
- Identification of Colonization Factors in the *Aeromonas-Hirudo medicinalis* symbiosis. University of Connecticut Research Foundation. P.I. Graf. Duration: 1/02 - 12/02.

Service to the University Community

- Obtained funding and established UConn Microbiome Research Seed Grants: For 3 years, UConn and UConn Health provided \$150,000 per year as seed grants (\$25,000 to \$50,000 each) to UConn researchers to launch new microbiome research projects.
- Microbial Analysis, Research and Services (MARS): Established and secured funding for a new university-wide facility to for sequencing microbiomes and small genomes. This

includes a high-throughput sample preparation pipeline for DNA isolation, PCR amplification and post-PCR handling. Data analysis and training is provided as well. MiSeq facility: Spearheaded the acquisition of an Illumina MiSeq and setup a facility and coordinated the training and certification of users (2011 – 2014). Co-founder of the Center for Microbial Systems, Ecology and Evolution. The center facilitates communication and collaboration between microbiologists working in different school and departments at the University of Connecticut and at the University of Connecticut Health Center. Director of Professional Science Master's in Microbial Systems Analysis. This Master's degree prepares students for the workforce in the biotech, pharmaceutical and government sectors. Member of the University Senate (2016 to 2019).

Professional Societies:

American Society for Microbiology
International Symbiosis Society
American Association for the Advancement of Science
Microbiome Center Consortium

Selected Outreach Activities:

Microbiome Center Consortium, Executive Committee (2022 – present)
Microbiome Center Consortium, Mentoring and Workforce Development Committee chair (2022 – present)
American Society for Microbiology, mBio, Junior Reviewer Mentoring Team (2022 to present)
NIH RECOVER Microbiology Task Force Committee (2022 – present)
American Society for Microbiology, Microbiome Communication Taskforce (2015 – 2016).
American Society for Microbiology, General Meeting Organizing Committee (2011- 2015).
NIH: NCBI-Taxonomy workshop and advisory committee (2015 - 2016)
Principle Co-organizer for the 4th ASM Beneficial Microbes Conference in San Antonio (2012).
Organizing Committee for the 5th ASM Beneficial Microbes Conference in Washington, DC (2014).
Organizing Committee for the 11th International *Aeromonas Plesiomonas* Symposium in Montpellier, France (2014).
International Symbiosis Society: Vice president 2009 – 12: developed the website <http://iss-symbiosis.org> and digitized the Symbiosis journal
Mentor Connection, a 3-week summer program for talented high school students (2002 - 2015). Each summer we hosted ~3 high school students in the lab and they perform hands on experiments.
Young Scholar Senior Summit, a 3-week summer program for talented high school students (2018-2019, 2021-2022). Each summer we hosted up to 3 high school students in the lab and they perform hands on experiments.

Press Coverage:

- “Antibiotic-resistant infections appeared after surgery. Were they transmitted by leeches?” STAT <https://www.statnews.com/2018/07/24/antibiotic-resistant-infections-leeches/> (2018).
- Youtube video: https://www.youtube.com/watch?time_continue=4&v=yGSPFQscLb0 (2018).
- “What leech gut bacteria can tell us about drug resistance” ScienceNews <https://www.sciencenews.org/article/bacteria-leech-guts-antibiotic-resistance> (2018).
- “Report from the Leech’s Gut: Even Trace Amounts of Antibiotics Boost Resistant Bacteria” Infection Control Today <https://www.infectioncontrolday.com/antibiotics-antimicrobials/report-leechs-gut-even-trace-amounts-antibiotics-boost-resistant-bacteria> (2018).
- “Leeches Help Solve Antibiotic Mystery Spanning Two Continents?” UConn Today <https://today.uconn.edu/2018/07/report-leechs-gut-even-trace-amounts-antibiotics-boost-resistant-bacteria/> (2018).
- “Antibiotic resistance in a leech's gut: Even trace amounts of antibiotics boost resistant bacteria” Phys.org <https://phys.org/news/2018-07-antibiotic-resistance-leech-gut.html> (2018).
- “Even low levels of antibiotics in chicken can cause bacterial resistance” The South Asian Times <http://www.thesouthasiatimes.info/news-Even-low-levels-of-antibiotics-in-chicken-can-cause-bacterial-resistance-215873-Health-23.html> (2018).
- “Top of Mind with Julie Rose” live interview with Julie Rose from BYU broadcasting on the premature infant microbiome (2016).
- “Where we live” with John Dankosky from WNPR broadcasted an interview about the microbiome (2013).
- Article by John Otrompke in [Microbe](#) based on my talk at ISME 2012 and the mBio 2011 publication. Next-Generation Sequencing Provides Help in Growing “Uncultivable” Microbes.
- Comments about mBio 2011 publication in [F1000 Prime](#) (2012).
- How to train your microbe: metatranscriptomics as a care and feeding guide for bacteria. Blog about mBio 2011 publication [mBiosphere](#) (2012).
- Ekelhaft Gesund, a French-German documentary on leech therapy aired in several European countries. One section was filmed in my laboratory and I was interviewed (2007). <http://www.oval-download.com/ekelhaftgesund/blutegel/studien.htm>

Teaching:

- Pathogenic Microbiology (Fall 2003 – 2009 & 2011 - present, 4 credits)
- Mechanism of Bacterial Pathogenesis (Fall 2003 – 2009 & 2011 - present, 3 credits)
- Experiments in Bacterial Genetics (Spring 2008 to present, alternate years, 3 credits)
- Rotations in MCB Laboratories (Fall 2012 – present, 3 credits)
- Professional Development Seminar (Spring 2015– present, 1 credit)
- Introduction to the MiSeq (Summer and Winter 2012 – 2015, 1 credit)
- Seminar in Microbiology (Fall 2002, Spring 2004, Fall 2005, Spring 2009, 2010, 1 credit)
- Seminar in Symbiosis (Fall 2006, 1 credit, co-taught)
- Frontiers in Microbiology (Spring 2010 & 2012 to present, 1 credit)
- Microbial Physiology (Spring 2002, 2005 - 2007, 2009, 2011, 2013, 3 credits, co-taught)
- Introduction to Research in Microbiology (Fall 2008, 3 credits)

Undergraduate Seminar in Pathogenic Microbiology (Spring 2003, 3 credits)
Introduction to Microbiology for medical students (1998-2001, team-taught)

Coordinated and mentored the teaching of modules taught by graduate students or staff:

Operations of a microbiology laboratory (Summer 2010, 2012, 2014)
Purification, Quantification and Quality Control of Nucleic Acids (Summer 2011, 2013, 2015, 2016, 2017, 2018, 2019)
Introduction to the Illumina MiSeq (Summer and Winter 2012 – 2014)
Bacterial Transcriptome sequencing using Illumina (Summer 2010)
Bioinformatic analysis of bacterial transcriptomes (Winter 2011)
Bacterial Genome Sequencing, Assembly and Annotation (Summer 2012, Winter 2013, 2014, 2015, 2016, 2017, 2018, 2019)
Ultra-deep sequencing of microbiomes (Summer 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2022)
SARS CoV-2 detection and strain typing using qPCR and MinION sequencing (2021)

Committees

College or University committees:

CLAS Awards Committee (2022 to 2023)
University Senate (2016 to 2019)
University Senate Growth and Development Committee (2016 to 2018)
University Senate Budget Committee (2018-2019)
Next Generation Fellowship Committee (2015)
Next Generation Sequencing Advisory Committee to the VPR (2014 – 2015)
Research Compliance Advisory Group to the VPR (2014)
Search Committee for Microbiologist in the Dept of Animal Sciences (2018)
Search Committee for Biotech Center Microbiologist Specialist (2014)
Search Committee for Biotech Center Bioinformatics Specialist (2012-13)
CLAS Deans Scholarship committee (2010 – 2012)
Institutional Biosafety Committee (2009 – 2015)
Vice chair (2011 – 2015)
University of Connecticut Health Center, Dept. of Medicine Retreat Committee (2011-12)
Head of the Graduate Program in Microbiology (2008 - 12)
Search Committee for Pharmaceutical Sciences (2011-12)

Departmental or Center Committees:

Search Committee for Microbiome Cluster hire, Chair (2023-present)
Search Committee for MCB Biophysics-Biochemist (2022-23)
Publicity, website and social media presence, Chair (2022-23)
Honors and University Scholars committee (2008 to 2016, 2022-present)
Professional Science Master's Advisory Committee (2009 to present)
Search Committee for Animal Science Department Microbiome Researcher (2018-19)
Search Committee for MCB Microbiome Researcher (2014-15)
Search Committee for MCB Microbiologist (2012-13)
Promotion, Tenure and Reappointment Committee of Mol. & Cell Biol. (2009 – 10, 2012-13)

Microbiology Search Committee (2012-13)
Advisory Committee of the Dept. of Molecular and Cell Biology (2003-07, 2009 -11, 2012-2022)
Graduate Admissions Committee (2008 - 10)
Courses and Curriculum Committee (2007 - 09)
Chair of Microbiology Search Committee (2006)
Chair of Graduate student recruitment committee (2009 - 12)
Graduate student recruitment committee (2004 - 07)

Training

Official faculty mentor:

Dr. Cheryl Andam, Assistant Professor, University of New Hampshire (currently Assistant Professor SUNY at Albany), Dr. Xiaomei Cong, Associate Professor, School of Nursing, UConn (currently Associate Dean, School of Nursing at UConn); Dr. Marcy Balunas, Assistant Professor, School of Pharmacy, UConn (currently Associate Professor, University of Michigan); and Spencer Nyholm, Assistant Professor, Dept. of Mol. and Cell Biology, UConn (currently Professor at UConn)

Visiting scientists:

Iain Whitaker, M.D., Michelle Rosado, Ph.D.

Postdoctoral fellows:

Dr. Jeremiah Marden (current), Dr. Todd Testerman (Technical Transfer Fellow, NIH), Dr. Lidia Beka (Technical Transfer Manager, NIH), Dr. Jacquelynn Benjamino (Associate Medical Director, Communication Partners), Dr. Michael Nelson (Director, Production Bioinformatics Operation, Sema4), Dr. Michele Maltz (Research Assist. Prof. at Univ. of Connecticut), Dr. Rita Rio (Prof. at West Virginia University), Dr. Yoshitomo Kikuchi (Senior Researcher AIST, and Associate Professor Hokkaido Univ, Japan)

Graduate students:

Alexei Girod (current), Caroline Viera Da Silva (current), Angeline Casale (current), Brandon O'Sullivan (current), Todd Testerman (2022) Emily McClure (2019), Lidia Beka (2018), Meredith Mistretta (M.S. 2018), Jacqui Benjamino (Ph.D. 2017), Sophie Colston (Ph.D. 2015), Kiefer Rodriguez (2016), Courtney Kimble-Badget (M.S. 2013) Lindsey Bomar (Ph.D. 2012, Postdoctoral Fellow at Forsythe Institute), Cory Cates (M.S. 2011, Goodwin College), Michele Maltz (Ph.D. 2010, Yale University;), Adam Silver (Ph.D. 2008, Yale Univ.; Assistant Professor University of Hartford), Natasha Rabinowitz (M.S. 2007, HistoRx), Ran Yu (Ph.D. 2007, co-advisor, Columbia University), Paul Worthen (M.S. 2006, QuestDiagnostics), Marc Fantozzi (M.S. 2005), Yen Lemire (M.S. 2004, Univ. Connecticut), Jonathan Hill (M.S. 2003, Boeringer Ingelheim)

PSM Masters students:

Keith Kozelka (M.S. 2011), Adrienne Tomasi (M.S. 2012), Arlene Juaton (M.S. 2012), Jain Maitreyee (M.S. 2013), Emre Aksoy (M.S. 2013), Courtney Kimble-Badget (2013), Stacha Campbell (M.S. 2014), Greg Mirando (2014), Andrew Hirsbrunner (2014), Dana Fowler (2014), Gerard Ryan (current), Peihua Wang (2015), Austin Ricker (2015), Jennifer McCluseky (current), Dister Deoss (2016), Philip Estrin (2016), Anna Hinman (2016), Nathan Lawlor (2015), Keifer Rodriguez (2016), Erin Breaker (2017), Ethan Cope (2017), Emmanuel Divinagracia (2017), Ed Beauregard (2018), Sasha Richardson (2018), Dominique Carillo (2018), Marat Vasilenko (2019), Nahian Rahman (2018), Luoxuan

Quyang (2019), Susanna Lenz (2019), Emily Gagnon (2019), Eric Jackson (2019), Feissal Djoule(2020), Zoe Scholar (2020), Hailey Donohue (2020), Jackson Keaton (2020), Rytis Sidabras (2021), Kyke Guzy (2022), Brett Rasile (2022), Kristina Dibble (current), Molly Schiffer (current), Michael Martinez (current), Emilie Karovic (current), Sarah Qiu (current).

Undergraduate students:

Christina Aglieco (honors, current), Darren Lee (honors, current), Jackie Varga (2021), Lauren Daddi (2022, recipient of outstanding MCB senior award, B.S. with honors), Amy Nelson (2019, B.S. with honors), Allie Watson (2019, B.S. with honors), Daniel Silverstein (2019, B.S. with honors), Racquel Hensing (2017), Emily Lamarre (2017, B.S. with honors), Amy Lin (2016), Abhishek Yadab (2016), Spoothi Sampath (2017), Daniel Golden (2015), James McGann (2015) Nancy Toubas (2012), Bryan Swanson (2013), Stephanie Ha (2013), Mohammed Mahran (2011), Sonali Bishnoi (B.S. with Honors 2013) Mary Oukwu (B.S. with Honors 2012, recipient of ASM undergraduate fellowship), Hyun Kim (2009), Emre Aksoy (2009), Vijath Fernando, Veronica DeJesus (B.S. with Honors 2010), Joshua Faucher (B.S. with Honors 2010), Kate Vaughan (B.S. with Honors 2009), Jinghan Peng, Chadene Zack (B.S. with Honors 2008, recipient of ASM undergraduate fellowship), Alex Reiss (B.S. 2008), Alison Laufer (B.S. with Honors 2006, recipient of ASM undergraduate fellowship), Andrew Stefka (B.S. with Honors 2006), Cindy Gode (B.S. 2005), Yen Lemire (B.S. 2003), Maria Shaker (B.S. with Honors 2003), Barb LeVarge (B.S. with Honors 2003)

High School students (Senior research project):

Viyath Fernando, Daniel Hughes

Outside Advisor for 3 Ph.D. students at different Institutions

Advisory Board Member:

Biebertaler Blutegeizucht, GmbH, Biebertal, Germany
Intus Biosciences, formerly Shoreline Biome, Farmington, CT

Editorial Activities:

mBio, Editor (2019 – present)
Frontiers in Microbiology, Special Topics Editor (2020 – present)
Current Protocols in Toxicology, Special Topics Editor (2020 – 2022)
Frontiers in Microbiology, Associate Editor (2013 – 2019)
Science Advances, Associate Editor (2015 - 2017)
Applied and Environmental Microbiology, Editorial Board (2006 to 2014)
Zoology Science, Advisory Board (2010 to present)

Member of review panel:

Member of NSF panel (2006, 2007, 2008, 2011)
Member of NIH study section (2012, 2017, 2019)

Ad hoc reviewer (since 2002):

Antonie van Leeuwenhoek Journal of Microbiology, Aquaculture, Austrian Science Fund, Biological Bulletin, BMC Infectious Diseases, BMC Evolutionary Biology, BMC Microbiology, Cell Host Microbe, Cell Stress & Chaperones, Cellular Microbiology, Civilian Research and Development Foundation, Cladistics, Comparative Biochemistry and Physiology, DNA and Cell

Biology, Environmental Microbiology, FEMS Immunology and Medical Microbiology, Infection and Immunity, IJSEM, ISME Journal, Journal of Bacteriology, mBio, Microbial Ecology, Molecular Microbiology, National Science Foundation, Nature Reviews in Microbiology, Naturwissenschaften, Proceeding of the National Academy of Science (USA), Trends in Immunology, University California Internal Grant review, Zoological Science.

Invited Lectures (since 2002):

3rd Int. Conference on the Subterranean Termite, Honolulu (2023)
Lab Roots: Microbiology Virtual Week (2020)
Cell Press Lab Links, Cambridge, MA (2020)
EAAP conference, Porto, Portugal (2019)
Eastern Fish Health Conference, Lake Placid, NY (2019)
ASM Connecticut Valley Regional Conference, Storrs, CT (2017)
Queens College, NY (2017)
ASM Microbe, New Orleans, LA (2017)
VAAM, Würzburg, Germany (2017)
Penn State University, State College, PA (2015)
Aarburg University, Aarburg, Denmark (2014)
Castleton College, Castleton, NY (2014)
Florida Genomics Institute Conference, Gainesville, FL (2014)
Yale University, New Haven (2014)
NESCent, Durham, NC (2014)
MBL Microbial Diversity Course, Woods Hole, MA (2014)
11th Int. *Aeromonas/Plesiomonas* Symposium, Montpellier, France (2014)
USDA ARS NCCCRC, Leetown, WV (2014)
Indiana University, Bloomington, IN (2014)
Keystone Conference on Microbe-Invertebrate Interactions, Lake Tahoe, CA (2014)
Molecular Investigation of Microbe-Host Interaction XXV, Madison, WI,
keynote lecture (2013)
Western Connecticut State University, Danbury, CT (2013)
ASM regional Conference, Storrs, CT (2013)
University of Connecticut Health Center, Farmington, CT (2013)
Illumina Discovery Symposium, Denver, CO (2013)
Dynamics of Host-Associated Communities Conference, NIH, Bethesda (2013)
Providence College, Providence, RI (2013)
College of Holy Cross, Worcester, MA (2012)
Illumina Users Conference, New Haven, CT (2012)
International Society for Microbial Ecology, Copenhagen, Denmark (2012)
General Meeting of the American Society for Microbiology, San Francisco (2012)
Wadsworth Institute, Albany, NY (2012)
10th Int. *Aeromonas/Plesiomonas* Symposium, Galveston, Tx (2011)
Cornell University, Ithaca, NY (2011)
Broad Institute, Cambridge, MA (2011)
Aegean Conferences on Model Hosts, Crete, Greece (2010)
Broad Institute, Cambridge, MA (2010)
COST workshop, Zürich, Switzerland (2010)
International Symbiosis Society, Madison, WI (2009)

American Genetic Association Special Event, Storrs, CT (2009)
General Meeting of the American Society for Microbiology, Philadelphia, PA (2009)
Columbia University, New York, NY (2009)
Colby College, Waterville, ME (2008)
International Society for Microbial Ecology, Cairns, Australia (2008)
Molecular Investigation of Microbe-Host Interaction XX, Coconut Island, HI (2008)
ASM regional meeting, Boston (2007)
Michigan State University, East Lansing, MI (2007)
MO/MIP PI meeting, Washington. DC (2007)
Harvard University, Cambridge, MA (2007)
Marine Biological Laboratory, Woods Hole, MA. (2006)
International Symbiosis Society, Vienna, Austria (2006)
International Society for Comparative and Developmental Immunology, Charleston (2006)
General meeting of the American Society for Microbiology (2006)
International Society for Industrial Microbiology, Chicago (2005)
8th Int. *Aeromonas/Plesiomonas* Symposium, Halifax, Canada (2005)
University of New Hampshire (2004)
NEMPET meeting (2003)
Loyola University, Chicago (2003)
University of Maine at Orono (2002)
Rhode Island College (2002)

Peer reviewed publications (* indicate undergraduate authors):

<https://scholar.google.com/citations?hl=en&user=IJBmv3AAAAAJ>

In preparation

Submitted, BioRxiv or MedRxiv

1. Testerman, T., J. Varga, H. Donohue, C. Vieira Da Silva, and J. Graf. *Pseudomonas apudapuas* sp. nov., *Pseudomonas fontis* sp. nov., *Pseudomonas idahonensis* sp. nov., and *Pseudomonas rubra* sp. nov. isolated from in, and around, a rainbow trout farm. BioRxiv doi: <https://doi.org/10.1101/2022.10.04.510816>
2. Kloub, L., Gosselin, S., Graf, J. Gogarten, J.P. and M. Bansal. Systematic Differentiation of Additive and Replacing Horizontal Gene Transfers using Phylogenies and Whole Genomes

Published or in press:

1. Maltz-Matyschysk, M., C. Melchiorre, K.W. Herbst, A.H. Hogan, K. Dibble, B. O'Sullivan, J. Graf, A. Jadhav, D. Lawrence, W. Lee, K.J. Carson, J.D. Radolf, J.C. Salazar, M.A. Lynes. 2023. Development of a Biomarker Signature using Grating coupled Fluorescence Plasmonic Microarray for diagnosis of MIS-C. *Frontiers in Bioengineering*. 11:1066391. <https://doi.org/10.3389/fbioe.2023.1066391>
2. Brumfield, K.D., M.J. Raupp, D. Haji, C. Simon, J. Graf, J.R. Cooley, S.T. Janton, R. Meister, A. Huq, R.R. Colwell, N.A. Hasan. 2022. Cicada microbiome – Insights from 16S rRNA analysis of 17-year periodical cicadas (Hemiptera: Magicicada spp.) Broods II, VI, and X. *Scientific Reports*. 12: 1-16. <https://doi.org/10.1038/s41598-022-20527-7>
3. Casale, A, C.A. Maldonado, O. Taropawala, B. O'Sullivan, J. Graf. 2022. Draft Genome Sequence of *Plesiomonas shigelloides* MD22D9, Isolated from the Digestive Tract of

- Macrobodella decora*. Microbiology Resource Announcements. e00939-22. DOI: <https://doi.org/10.1128/mra.00939-22>
4. Testerman, T., L. Beka, S. R. Reichley, S. King, T. J. Welch, G. D. Wiens, J. Graf. 2022. Large-Scale, Multi-Year Microbial Community Survey of a Freshwater Trout Aquaculture Facility. *FEMS Microbiol. Ecol.* **98**:fiac101. <https://doi.org/10.1093/femsec/fiac101>
<https://doi.org/10.1093/femsec/fiac101>
 5. Testerman, T., Z. Li, B. Galuppo, J. Graf, Nicola Santoro. 2022. Insights from shotgun metagenomics into bacterial species and metabolic pathways associated with nonalcoholic fatty liver disease (NAFLD) in obese youth. *Hepatology*. Comm. doi: <https://doi.org/10.1002/hep4.1944>
 6. Stephens, M.E., J. Benjamino, J. Graf, D.J. Gage. 2022. Simultaneous Single-Cell Genome and Transcriptome Sequencing of Termite Hindgut Protists Reveals Metabolic and Evolutionary Traits of Their Endosymbionts. *mSphere*. 23:e0002122 doi: <https://doi.org/10.1101/2020.12.11.422253>.
 7. Testerman, T., L. Beka, EA. McClure, S. Reichley, S. King, T. Welch, and J. Graf. 2022. Detecting Flavobacterial Fish Pathogens in the Environment Using High-Throughput Community Analysis. *Appl. Environ. Microbiol.* 88:e02092-21. <https://doi.org/10.1128/AEM.02092-21>
 8. Thees, AV, KM Pietrosimone, CK Melchiorre, JN Marden, J Graf, MA Lynes, M Maltz. 2021. PmtA Regulates Pyocyanin Expression and Biofilm Formation in *Pseudomonas aeruginosa*. *Frontiers in Microbiol.* DOI: [10.3389/fmicb.2021.789765](https://doi.org/10.3389/fmicb.2021.789765).
 9. Presley, SJ, J Graf, AF Hassan, AR Sjodin, and MR Willig. 2021. Effects of host species identity and diet on biodiversity of oral and rectal microbiomes of Puerto Rican bats. *Curr. Microbiol.* 78:3526-40. <https://doi.org/10.1007/s00284-021-02607-5>
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