CURRICULUM VITAE

CAROLINE ATTARDO GENCO, PH.D.

Provost and Senior Vice President *ad interim*, Tufts University
Arthur E. Spiller M.D. Endowed Professor in Genetics, Tufts University School of Medicine
Office of the Provost, Tufts University, Ballou Hall, 1 The Green, Medford, MA 02155
Caroline.Genco@tufts.edu

Academic Appointments and Administrative Positions

2022-present Provost and Senior Vice President *ad interim*, Tufts University, Arthur E. Spiller, M.D. Professor, Department of Immunology, Tufts University School of Medicine, Boston, MA

2019-2021 Vice Provost for Research, Tufts University, Arthur E. Spiller, M.D. Professor, Department of Immunology, Tufts University School of Medicine, Boston, MA

2017-2019 Arthur E. Spiller, M.D. Professor and Chair, Department of Immunology, Tufts University School of Medicine, Boston, MA

2015-2017 Arthur E. Spiller, M.D. Professor (tenured) and Chair, Department of Integrative Physiology and Pathobiology, Tufts University School of Medicine, Boston, MA

2014-2015 Affiliate Faculty Member, Department of Biomedical Engineering, Boston University College of Engineering, Boston, MA

2010-2013 Research Director, Section of Infectious Diseases, Department of Medicine, Boston University School of Medicine, Boston, MA

2003-2015 Professor, Department of Medicine and Department of Microbiology, Boston University School of Medicine, Boston, MA

1997-2003 Associate Professor, Department of Medicine, Section of Infectious Diseases and Department of Microbiology, Boston University School of Medicine, Boston, MA and Department of Periodontology and Oral Biology, Boston University Goldman School of Dental Medicine, Boston, MA

1993-1997 Associate Professor, Department of Microbiology and Immunology, Member of the Graduate Faculty, Morehouse School of Medicine, Atlanta, Georgia; Adjunct Associate Professor, Department of Biological Sciences, Clark Atlanta University, and Georgia State University, Atlanta, GA

1991-1993 Assistant Professor, Department of Microbiology and Immunology, Member of the Graduate Faculty, Morehouse School of Medicine, Atlanta, GA; Adjunct Assistant Professor, Department of Biological Sciences, Clark Atlanta University, and Georgia State University, Atlanta, GA

1989-1991 Assistant Professor, Department of Oral Biology, Emory University School of Postgraduate Dentistry, Atlanta, GA

1987- 1989 National Research Council Research Associate, Sexually Transmitted Disease Laboratory Program, Centers for Disease Control and Prevention, Atlanta, GA

Academic Training / Education

1987 PhD, Microbiology, School of Medicine and Dentistry, University of Rochester, Rochester, NY

1984 MS, Microbiology, School of Medicine and Dentistry, University of Rochester, Rochester, NY

1981 BS, Biology, State University of New York College at Fredonia, Fredonia, NY

Academic Honors

2017 *Hedwig van Ameringen* Executive Leadership in Academic Medicine (ELAM®) Class of 2017-2018 Fellow. The ELAM® program is a year-long fellowship for the best and brightest women faculty in schools of medicine, dentistry and public health. The program is dedicated to developing the professional and personal skills required to lead and manage in today's complex health care environment, with special attention to the unique challenges facing women in leadership positions.

2012 Lifetime Achievement Award for Research and Service, Department of Medicine, Boston University School of Medicine, Boston, MA

2007 National Center on Minority Health and Health Disparities Health Disparities Scholar

2005 National Center on Minority Health and Health Disparities Health Disparities Scholar

1994 Deans Award, Morehouse School of Medicine, Atlanta, GA

1993 Sigma Xi National Scientific Honor Society

1992 Young Investigator Award, 9th International Conference on Periodontal Research, Osaka, Japan

1987-1989 National Research Council Associateship Award

1980 Frank G. Brooks Award for First Place in Excellence in Student Research at Biennial Convention of Beta Beta Beta National Biological Honor Society

1979-1981 President and Member of Upsilon Chi Chapter, Beta Beta Beta National Biological Honor Society

University Committees / Associations

2022-present Academic Affairs Committee, Board of Trustees, Tufts University

2022-present Academic Council, Tufts University

2022-present Administrative Council, Tufts University

2022-present Capital Planning Committee, Tufts University

2022-present Chair, Deans Council, Tufts University

2022-present Chair, Tufts CTSI Financial Oversight Committee, Tufts University

2022-present Chair, Tufts CTSI Founders Committee, Tufts University

2022-present Chair, Tufts University Cabinet on Diversity, Equity and Inclusion, Tufts University

2022-present Diversity and Inclusion Leadership Council, Tufts University

2022-present Executive Budget Committee, Tufts University

2022-present Executive Capital Committee, Tufts University

2021 Co-Chair, Tufts FIRST Cohort Program Executive Committee, Tufts University

2021 Financial Model Review Committee, Tufts University

2020-present Board Member, BrainGate

2020-2022 COVID-19 Coordinating Committee, Tufts University

2020 Chair, COVID-19 Research Continuity Committee, Tufts University

2020 Chair, COVID-19 Research Group Steering Committee, Tufts University

2020 Co-Chair, Research Working Group, Tufts University-Tufts Medicine Integration Task Force, Tufts University

2020 Co-Chair, Occupational Health Steering Committee, Tufts University

2019-present	President's Senior Leadership Team, Tufts University
2019-present	University Risk & Compliance Committee, Tufts University
2019-2021	Chair, Research Council, Tufts University
2019-2021	Chair, Comparative Medicine Services Financial Oversight Committee, Tufts University
2019-2021	Tufts CTSI Financial Oversight Committee, Tufts University
2019-2021	Tufts CTSI Founders Committee, Tufts University
2017-2018	Faculty Representative, University Advancement Committee, Board of Trustees, Tufts University
2017	Research and Scholarship Strategic Planning Committee, Tufts University
2016	Academic Subcommittee, Tufts University School of Medicine
2015-2016	Salary Compensation Committee, Tufts University School of Medicine
2012-2015	Graduate Medical Sciences Advisory Committee, Boston University
2008-2015	Boston University Genome Science Institute, Boston University
2008-2015	Department of Pathology Qualifying Committee, Boston University
2008-2013	Faculty Development and Diversity Committee, Boston University
2007-2010	Chair, Institutional Biosafety Committee, Boston University
2007-2010	Human Gene Therapy Committee, Boston University
2006-2015	Molecular Medicine Graduate Student Admissions, Boston University
2006-2015	Department of Medicine Molecular Medicine Qualifying Committee, Boston University
2006-2010	Faculty Affairs Committee, Boston University School of Medicine
2005-2015	Faculty Search Committees, Microbiology and Medicine, Boston University
2004-2015	Microbiology Faculty Appointment and Promotions Committee, Boston University
2003-2010	Institutional Biosafety Committee, Boston University
2003-2007	Women in Science in the Department of Medicine, Boston University
2000-2015	Microbiology Graduate Student Admissions, Boston University
1998-2015	Department of Microbiology Qualifying Committee, Boston University

Teaching Experience

2017	Inflammation & Chronic Inflammatory Diseases	Tufts University Graduate School of Biomedical Sciences (GSBS)
2017	Immunologic Mechanisms	GSBS
2017	Medical Immunology – Small Groups	Tufts University School of Medicine
2007-2011	Infection and Immunity Course Director	Boston University Graduate Medical Sciences (BUGMS)
2006-2015	Molecular Medicine Journal Club	BUGMS
2006-2011	Concepts in Infectious Diseases	Boston University School of Public Health
2004-2006	Advanced Immunology	BUGMS
2001-2007	Microbial Pathogenesis Course Co-Director	BUGMS
2000-2002	Advanced Oral Biology	BUGMS
1998-2015	Microbiology Journal Club	BUGMS
1998-2011	Dental Microbiology SDM	Boston University School of Medicine (BUSM)
1998-2011	Concepts in Microbiology	BUGMS
1998-2004	MMEDIC Microbiology	BUGMS
1998-2011	Medical Microbiology	BUSM

External Teaching

2000-2012	Harvard University School of Dental Medicine, Boston, MA. Advanced Oral Biology
2000-2001	Tufts University School of Dental Medicine, Boston, MA. Advanced Oral Biology
1992-1997	Morehouse School of Medicine, Atlanta, GA. Medical Microbiology and Immunology

1989-1990 Emory University School of Postgraduate Dentistry, Atlanta, GA. Graduate Microbiology and Immunology
1982-1984 School of Medicine & Dentistry, University of Rochester, Rochester NY. Microbiology Laboratory

Mentoring / Graduate Students and Postdoctoral Research Associates
*Denotes underrepresented trainee

A. Graduate Students
Current Students

Year	Name	Degree	Status
2019-present	Nicholas Franks	PhD	In Progress
2017-present	Ashwini Sunkavalli	PhD	In Progress

Previous Students

Year	Name	Degree	Status
2016-2020	Alexandra Simas	PhD	Test Engineer, Ginkgo Bioworks, Inc.
2014-2019	G. Papadopoulos	PhD	Scientist, Takeda
2012- 2017	Jessica Ritter	PhD	Scientist, Verseau Therapeutics
2011-2015	Kate Nudel	PhD	Scientist, Manifold Bio
2011-2015	Connie Slocum	PhD	Medical Writer, Takeda
2009-2014	Ryan McClure	PhD	Scientist, Pacific NW National Lab
2006-2011	*Andres Madrigal	PhD	Fellow, Oregon Health & Science Univ.
2007-2009	Michael Tsang	MS	Unknown
2005-2009	Jeffrey Mellin	PhD	Scientist, Zymergen, Inc, San Francisco
2003-2008	Sarah Follows	PhD	Clin Ass. Antigenics, Andover MA
2006-2007	*Luis Meggo	MS	Fellow, Oregon Health & Science Univ.
2006-2007	Jay Murlidharan	MS	Unknown
2003-2007	Michael Davey	PhD	Dentist
2002-2004	Peter Mydel	PhD	Unknown
2001-2005	Xinyan Liu	PhD	Unknown
2001-2004	Anita Sroka	PhD	Res. Asst. Univ of Krakow, Poland
2001-2003	Hillary Gallogly	MS	Unknown
1999-2001	Eric Garges	MS	Uniformed Services Univ., Bethesda, MD
1996-2002	Shite Sebastian	PhD	Executive Director Affinivax Inc.
1995-1997	Paku Desai	MS	Res. Sci, San Diego
1994-2001	*Waltena Simpson	DSC	Assoc. Prof, South Carolina University

B. Postdoctoral Fellows
Current

Year	Name	Degree	Status
2018-present	Ana Paula Lourenço	PhD	In Progress

Previous

Year	Name	Degree	Status
2018-2019	Phillip Balzano	PhD	Scientist, Berkeley Lights, San Francisco,
2016-2017	Matthew Moreau	PhD	Faculty, Salve Regina University
2014-2015	Samta Jain	PhD	Postdoc, Northeastern, Boston, MA
2012-2014	Jennifer Smith	PhD	Postdoc, Baylor College of Med, TX
2011-2015	Carolyn Kramer	PhD	Research Associate, Tufts University
2009-2013	Nadine Daou	PhD	Scientist, Discovery Axcella Health
2009-2013	Chunxiao Yu	PhD	Scientist AskGene Pharma, San Diego

2009-2015	Ken Barth	PhD	Senior Scientist, Empress Therapeutics
2007-2011	Chie Hayashi	DDS, PhD	Periodontist
2007-2008	Mayu Onishi	DDS, PhD	Ichigaya Kudankita Dental Surgery, Japan
2005-2007	Takashi, Ukai	DDS, PhD	Asst. Prof, Nagasaki Univ, Japan
2004-2006	Susan Grogan	PhD	Biological Safety Unit, United Kingdom
2002-2006	Y. S-Dasthtagirisaheb	PhD	Instructor BUSM, Boston, MA
2002-2005	Hiromichi Yumoto	DDS, PhD	Asst. Prof, Univ. Tokushima, Japan
2001-2004	Yusuke Takahashi	DDS, PhD	Deceased
1999-2001	Teresa Olzcak	PhD	Asst. Prof. Univ. Wroclaw, Poland
2000-2004	Sarika Agarwal	PhD	Instructor, Univ. Mass, Worcester, MA
1999-2001	Teresa Olzcak	PhD	Asst. Prof. Univ. Wroclaw, Poland
1998-2001	Frank Gibson	PhD	Assoc. Prof, Univ. Florida, Gainesville, FL
1995-1997	Ren Yo Forng	PhD	Scientist Amgen, Washington, D.C.
1995-1997	Chen Y. Wang	PhD	Unknown

C. Resident Research Fellows

Year	Name	Degree	Institution
2003-2005	Sofia Ostrer	DDS	Boston University School of Dentistry
2002-2004	Gabriela d' Empaire	DDS	Boston University School of Dentistry
2001-2002	Jodie Wong	DDS	Boston University School of Dentistry
2001-2002	Charlie Hong	DDS	Boston University School of Dentistry
2000-2001	Dario Gonzalez	DDS	Boston University School of Dentistry
2000-2001	Gabral Boustany	DDS	Boston University School of Dentistry

D. Visiting Scientists

Year	Name	Degree	Institution
2000-2002	Hamdy Nassar	DDS, PhD	Al-Azhar University, Cairo Egypt
2000-2002	Hsin-Hua Chou	DDS, PhD	Taipei Medical University, Taipei, Taiwan

E. Undergraduate Research Assistants

Year	Name	Institution
2019	*Justin Mollison	Nooma Bio
2020	Christopher Semancik	Tufts University
2020	Haneen Abderrazzaq	Tufts University
2020	Lina Fikri	Tufts University
2020	Emilie Zukowski	Tufts University
2013	Catherine Cattley	Boston University
2009	Ema Malsina	Boston University
2007-2009	Olivia Green	Northwestern University
2007-2008	Claudia Green	Davis College
2006-2007	Cynthia Gudino	Boston University
2005-2006	Matt Blango	Boston University
2004-2005	Karlee Giannitrapani	Boston University
2002	Kirsty McFarland	Boston University
2001	Dayna Martinez Zayas	Boston University

F. High School Students

Year	Name	Program
2005-2006	Olivia Green	Newton Country Day School
2003-2004	Claudia Green	Newton Country Day School
2002-2003	Lee Gustovsky	Boston University City Lab Program

2020	Cooper Golemme	Boston College High School

G. Graduate Thesis Advisory Committees

Student	Date	Degree	Institution
Linus Williams	2018-2021	PhD	Tufts University School of Medicine (TUSM), Tufts University Graduate School of Biomedical Sciences (GSBS)-Chair
Joe Sarhan	2017-2018	PhD	TUSM, GSBS
Jake Hopkins	2017	PhD	TUSM, GSBS
Essence Maston	2013-2016	PhD	Boston University School of Medicine (BUSM)-Molecular Medicine-Chair
El-Amady Admed	2012-2015	PhD	Georgia Health Sciences University
Julio Carrion	2009-2013	PhD	University of New York at Stony Brook
Amir Zeituni	2007-2010	PhD	University of New York at Stony Brook
Hemail Patel	2006-2008	PhD	Boston University School of Engineering-Biomedical Engineering
Elizabeth Palaimia	2005-2009	PhD	BUSM-Molecular Medicine-Chair
Alfred Tamyo	2005-2009	PhD	BUSM-Molecular Medicine-Chair
Kylle Daley	2005-2009	PhD	BUSM-Microbiology
Ana Avalos	2005-2009	PhD	BUSM-Microbiology-Chair
Karen Lee	2005-2008	PhD	BUSM-Microbiology-Chair
Eileen Dunne	2004-2009	PhD	BUSM-Microbiology
Marly Roche	2004-2009	PhD	BUSM-Pathology
Heather McLeod	2003-2007	PhD	BUSM-Microbiology-Chair
Aletta Schnitzer	2003-2007	PhD	BUSM-Pathology
Krisitin Perkins	2003-2007	PhD	BUSM-Microbiology
Lynn Decamp	2003-2007	PhD	BUSM-Microbiology
Theresa Singleton	2002-2006	PhD	BUSM-Microbiology
Yong Ding	2002-2006	PhD	BUSM-Oral Biology
Lauren Yaunch	2002-2006	PhD	BUSM-Microbiology
Jennifer Lam	2002-2006	PhD	BUSM-Microbiology

Other Professional Activities

Non-NIH Grant and Advisory Support

1. **WilmerHale,** Boston MA Consulting services - GSK vs Pfizer- Re vaccine patents. 2016-2017

2. **GSK Vaccines**, Sienna, Italy. Expert advisor for vaccine development. 2016

3. **VaxInnate,** Cranbury, NJ. Bacterial proteinases and TLRs. 2007

4. **Sanofi-Pasteur,** Toronto, Canada. Periodontal disease vaccine advisory board. 2007

5. **ECI Biotech,** Worcester MA. Localized delivery of a novel therapeutic agent for periodontal disease. Grant Support from R43 DE018075 (2007-2009) and ECI Biotech Funds. 2005-2008

6. **Eisai Research Institute**, Andover MA. TLR agonists for bacterial pathogens. 2002-2003

7. **Gillette Co.,** Boston, MA. Development of salivary biomarkers. 2002

8. **Chiron Vaccines**, Sienna Italy- Novartis, Emeryville CA, USA. Testing vaccine candidates for Neisseria. 2001-2004

9. **Pfizer,** Groton, CT. Therapeutics for periodontal disease. 2000

10. **Wyeth- Lederle Vaccines**, Pearl River, NY. Testing vaccine candidates for *Neisseria meningitidis* and *Streptococcus pneumoniae.* 1998-2004

External Review Boards and Advisory Committees

2023 Co-Organizer, 23rd International Pathogenic Neisseria Meeting, Boston MA

2020-2022 Member, External Advisory Board, University of Connecticut, National Institutes of Health U19 Sexually Transmitted Center, Farmington, CT

2020-2021 Member, Transformative Research Grants, Study Section, National Institutes of Health

2017-2019 Chair, Bacterial Pathogenesis Study Section, Center for Scientific Review / National Institutes of Health

2015-2019 Member, Bacterial Pathogenesis Study Section, Center for Scientific Review / National Institutes of Health

2010 Member, Center for Scientific Review / National Institutes of Health, College of Reviewers

2006 Reviewer, Meningitides Foundation, U.K; National Medical Research Council, Singapore; United States Army Medical Research and Material Command, USA

2006 Member, American Heart Association Peer Review

2002-2007 Councilor at Large, American Society for Microbiology

2000 Co-Organizer, 12th International Pathogenic Neisseria Meeting, Galveston, TX

1999-2002 Member, External Advisory Committee, Research Centers for Minority Institutions (RCMI), Meharry Medical College, Nashville, TN

1997 Member, Editorial Board Infection and Immunity, J. Periodontology, Oral Diseases

1997 Organizer, Molecular Mechanisms of Microbial Host Cell Interactions in Periodontal Diseases, St. Petersburg, FL

1995-1997 Member, National Institutes of Health Minority Biomedical Research Support Review Panel

1994-1998 Charter Member, Oral Biology & Medicine Study Section, National Institutes of Health

1994 Ad Hoc Reviewer, Nature Immunology, Nature Scientific Reports, Proc. Natl. Acad. Sci. USA, New England Journal of Medicine, Circulation Molecular Microbiology, Plos Pathogens Microbial Pathogenesis, J. Bacteriology, Vaccine, Cellular Microbiology, FEMS Microbiol. Lett. Microbiology, ATVB, Clin. Infec. Dis., Obesity Res., J. Immunol. Plos Pathogens

1994 Member, American Heart Association Study Sections

1994 Member, Center for Scientific Review / National Institutes of Health Study Sections - Host Pathogen; Atherosclerosis; Bacteriology; Human Microbiome; Oral Biology and Medicine; and COBRE-Chair (2002)

1994 Member, National Institutes of Health Study Sections – NIBIB-Special Emphasis Panel Point of Care Technologies; NIAID-R13; NIBIB-Center Grants; NIAID-R21 and R03; NIH-Minority Research support; NIDCR-K08

1992 -2008 Chair, Co-Chair, and Organizer of Symposia, for the Gordon Conference, IADR, and NIH sponsored meetings

1991-1993 Ad Hoc Member, Oral Biology & Medicine Study Section, National Institutes of Health

Professional Societies

2021-present President, Neisseria Gonorrhea Research Society (NgoRS)
American Society for Microbiology
American Association for the Advancement of Science
The Society for Anaerobic Microbiology
The Association for Women in Science

Patents

1. Vaccine compositions and methods for selecting antigens. US Patent # 17/631,694.

2. *P. gingivalis* immune modulators and uses thereof. US Patent # 16/964,577.

3. Use of gingipain peptides as immunogens for the prevention of colonization with *P. gingivalis*. US Patent # 6,129,917.

Research Grant Support

Active

1. **R01 AI116969** NIH/NIAID Genco (PI) 8/1/16-7/31/22. Global transcriptome analysis of mucosal gonococcal infection. No cost extension requested.

2. **R01 AI130946** NIH/NIAID Genco (PI) 8/18/17-7/31/23. The gonococcal Fur regulon: Link to pathogenesis. No cost extension.

3. **R01 AI142628** NIH/NIAID Genco (PI) 9/24/2018-8/31/2023. Microbial disruption of dendritic cell maturation and function.

4. **R01 AI166537** NIH/NIAID Massari (PI) Genco (Co-I) 9/01/2022-8/31/26. Novel vaccine antigens against *N. gonorrhoeae.*

Previous Support

1. **R21 AI131004** NIH/NIAID Massari (PI) Genco (Co-I) 12/15/2017-11/30/2021. Gonococcal *In-vivo* Expressed Factors (IVEFs) as novel vaccine antigens against *N. gonorrhoeae* infection.

2. **R01 DE023501** NIH/NIDCR Genco (PI) 5/1/13-3/31/18. *P. gingivalis* mediated evasion strategies.

3. **P01 AI078894** NIH/NIAID Genco (PI) 8/1/10-7/31/17. Role of the innate immune system in pathogen-induced chronic inflammation.

4. **R56 AI107821** NIH/NIAID Genco (PI) 8/1/14-7/31/16. Global transcriptome analysis of mucosal gonococcal infection.

5. **R56 DE024350** NIH/NIDCR Genco (PI) 9/24/14-8/31/16. TLR4 evasion, bacterial persistence and chronic inflammation.

6. **U19 AI084048** NIH/NIAID Rice (PI) Genco (Co-I) 9/25/09-6/30/15. Innate and adaptive Immunity in experimental and human gonococcal infection.

7. **T32 AI089673** NIH/NIAID Genco (PI) 9/1/11-8/30/15. Boston University Inflammatory Disorders Training Grant.

8. **R01 DE012768** NIH/NIDCR Darveau (PI) Genco (Co-I) 6/1/12-5/31/15. *P. gingivalis* lipid A phosphate: contribution to virulence.

9. **D43 TW009636** NIH/NIAID Ellner and Joloba (MPI) Genco (Scientific Director) 3/1/14-12/31/15. Training of Ugandans in basic research on TB and emerging infectious diseases.

10. **R01 AI048611** NIH/NIAID Genco (PI) 04/1/08-4/30/14. The gonococcal Fur regulon: Link to pathogenesis.

11. **R01 DE019786** NIH/NIDCR Genco (PI) 7/1/09-6/30/12. Innate immune bacterial recognition and osteoclastogenesis.

12. **P01 HL083801** NIH/NHLBI Vita (PI) Genco (Co-I) 5/1/06-4/30/11. Vascular consequences of insulin resistance and obesity: SCCOR in vascular injury, repair and remodeling.

13. **R01 DE018318** NIH/NIDCR Gibson (PI) Genco (Co-I) 4/1/07-3/31/11. Infection-elicited oral bone loss: TLR2 ontogeny and *Porphyromonas gingivalis*.

14. **R01 HL08387** NIH/NHLBI Genco (PI) 2/1/06-1/31/11. Invasive bacteria accelerate atherosclerosis through TLRs.

15. **R01 HL08387** NIH/NHLBI Genco (Mentor) Madrigal (M.D./Ph.D.) 2/1/07-1/31/10. Student-minority supplement.

16. **R01 DE09161** NIH/NIDCR Genco (PI) 9/1/01-8/31/06. Hemin capture strategies in *P. gingivalis.* This support included a minority supplement for graduate student Waltena Simpson.

17. **R01 AI44059** NIH/NIAID Genco (PI) 8/1/01-7/31/06. The gonococcal Fur-regulon: Link to pathogenesis.

18. **P01 DE13191** NIH/NIDCR Genco (PI) 4/1/00-3/31/05. Modulation of molecular pathogenesis in systemic diseases.

19. **R01 DE12517** NIH/NIDCR Genco (PI) 4/1/99-3/31/04. Use of *P. gingivalis* gingipain R1 peptides for oral immunization.

20. **U19 AI38515** NIH/NIAID Rice (PI) Genco (Co-I) 6/1/98-5/31/03. Sexually transmitted disease cooperative research center.

21. **R21** NIH/NIDCR Van Dyke (PI), Genco (Co-I) 9/1/01-8/31/03. Periodontal inflammation in type 1 diabetes.

22. **R01** NIH/NIDCR Travis (PI), Genco (Co-I) 7/1/02-6/30/04. Bacterial proteases in periodontal diseases.

23. **Bi-National Research Grant**- Hebrew University-Hadassah, Jerusalem, Israel and Boston University. Shapira (PI), Genco (Mentor). 1/1/02-12/31/04.

24. **R01 DE009161** NIH/NIDCR Genco (PI) 11/1/91-10/31/96. Iron utilization by *Bacteroides gingivalis*.

25. **R01 AI030797** NIH/NIAID Genco (PI) 9/30/91-7/31/96. Iron assimilation by the pathogenic Neisseria.

26. **R03 CA228007** NIH/NCI Genco (PI) 9/1/2018-8/31/2021 *Porphyromonas gingivalis* and pancreatic carcinogenesis in mouse models. No cost extension.

Training Grant Support-Present and Past

1. **NIAID T32** AI007422 Molecular Analysis of Microbial Pathogens. Isberg (PI), Genco (Training Faculty). 9/1/92-8/31/22.

2. **NHLBI R25** HL007785 Building Diversity in Biomedical Sciences. Munger (PI), Genco (Mentor). 5/1/93-1/31/23.

3. **NIMHD K12 HD092535** Tufts BIRCWH Program. Freund (PI), Genco (Mentor). 9/1/17-7/31/22.

4. **NIAID T32 AI07309** Research Training in Immunology. Sherr (PI), Genco (Training Faculty). 9/1/14-8/31/19.

5. **NHLBI T32 HL00724** Multidisciplinary Cardiovascular Training Grant. Bolotina (PI), Genco (Training Faculty). 7/1/11-6/30/17.

6. **NIAID T32 AI 007642** Training Program in Host-Pathogen Interactions - Predoctoral. Murphy (PI), Genco (Training Faculty). 9/1/08-8/31/13.

7. **NHLBI T32 HL007969** Training in Cardiovascular Biology- Predoctoral. Ravid (PI)- Genco (Training Faculty). 7/1/09-6/30/14.

8. **NIAID T32** Training Program in Host Pathogen Interactions - Postdoctoral. Rice (PI), Genco (Training Faculty) 7/2/02-6/30/07.

9. **NIDCR T32** Training Program in Oral Biology. Oppenheim (PI), Genco (Training Faculty) 9/20/89- 6/30/04.

10. **NIDCR F32** Oral Immunization with gingipain delivered by Salmonella. Gibson (PI), Genco (Mentor). 2/1/00-1/31/02.

Publications

1. **Genco, C.A., J.S. Knapp, and V.L. Clark.** 1984. Conjugation of plasmids of *Neisseria gonorrhoeae* to other *Neisseria* species: Potential reservoirs for the ß-lactamase plasmid. J. Infect. Dis. 150:397-401.

2. **Genco, C.A.** 1987. Conjugation of gonococcal plasmids to *Neisseria species*: Barriers to conjugation. Doctoral Thesis, School of Medicine and Dentistry, University of Rochester, Rochester, NY.

3. **Genco, C.A. and V.L. Clark.** 1988. The effect of outer membrane proteins and lipopolysaccharide on the ability of *Neisseria gonorrhoeae* to transfer plasmids by conjugation to *Neisseria cinerea*. In: Gonococci and Meningococci. J.T. Poolman, ed. Martinus Nishoff Publishers, Dordrecht, The Netherlands.

4. **Genco, C.A. and V.L. Clark.** 1988. Transfer of a gonococcal ß-lactamase plasmid to conjugation deficient *Neisseria cinerea* strains by transformation. J. Gen. Microbiol. 134:3277-3283.

5. **Genco, C.A. and V.L. Clark.** 1988. Inhibition of conjugal transfer of ß-lactamase plasmids from *Neisseria gonorrhoeae* to *Neisseria cinerea* by outer membrane proteins and lipopolysaccharide. J. Gen. Microbiol. 134:3285-3294.

6. **Chen, C.Y., C.A. Genco, J.P. Rock, and S.A. Morse.** 1989. Physiology and metabolism of *Neisseria gonorrhoeae* and *Neisseria meningitidis*. Clin. Microbiol. Rev. 2S: S35-S40.

7. **Berish, S.A., T.A. Mietzner, L.W. Mayer, C.A. Genco, B.P. Holloway, and S.A.Morse.** 1990. Molecular cloning and characterization of the structural gene for the major iron-regulated protein expressed by the pathogenic *Neisseria* species. J. Exp. Med. 171:1535-1546.

8. **Sarafian, S.K., C.A. Genco, M.C. Roberts, and J.S. Knapp.** 1990. Acquisition of ß-lactamase and TetM-containing conjugative plasmids by phenotypically different strains of *Neisseria gonorrhoeae*. Sex. Trans. Dis. 17:67-71.

9. **Genco, C.A., C.W. Cutler, D.R. Kapczynski, K.H. Maloney, and R.R. Arnold.** 1991. A novel mouse model to study the virulence of and host response to *Porphyromonas (Bacteroides) gingivalis*. Infect. Immun. 59:1255-1263.

10. **Genco, C.A., C.Y. Chen, R.J. Arko, D.R. Kapczynski, and S.A. Morse.** 1991. Isolation and characterization of a mutant of *Neisseria gonorrhoeae* that is defective in the uptake of iron from transferrin and hemoglobin and is avirulent in mouse subcutaneous chambers. J. Gen. Microbiol. 137:1313-132.

11. **Kapczynski, D.R., and C.A. Genco.** 1991. Genetic transformation of *Neisseria gonorrhoeae* using electroporation. pp. 527-532. In: Neisseriae 1990. M. Achtman, P. Kohl, C. Marchal, G. Morelli, A. Seiler, and B. Thiesen, ed. Walter de Gruyter & Co., Berlin, Germany.

12. **Morse, S. A., S. A. Berish, C.-Y. Chen, D. L. Trees, T. A. Mietzner, C. A. Genco, and D. R. Kapczynski.** 1991. Structure, function, and regulation of the iron-binding protein, Fbp. pp. 453-458. In: Neisseriae 1990. M. Achtman, P. Kohl, C. Marchal, G. Morelli, A. Seiler, and B. Thiesen, ed. Walter de Gruyter & Co., Berlin, Germany.

13. **Genco, C.A., and S. Modesitt.** 1992. Hemin induction of Congo red binding by *Bacteroides thetaiotaomicron*. pp. 149-156. In: Medical and Environmental Aspects of Anaerobes. B.I.

Duerden, J. Brazier, S.V. Seddon, W.G. Wade, ed. Wrightson Biomedical Publishing, Ltd. England.

14. **Genco, C.A., D.R. Kapczynski, C.W. Cutler, R. J. Arko, and R.R. Arnold.** 1992. Influence of immunization on *Porphyromonas gingivalis* colonization and invasion in the mouse chamber model. Infect. Immun. 60:1447-1454.

15. **Genco, C.A., D.A. Trees, S.A. Berish, C.-Y. Chen, and S.A. Morse.** 1994. Genetic diversity of the iron binding protein (Fbp) gene of the pathogenic and commensal *Neisseria*. FEMS Micro Lett. 116:123-130.

16. **Genco, C.A., B.M. Odusanya, and G. Brown.** 1994. Binding and accumulation of hemin in *Porphyromonas gingivalis* are induced by hemin. Infect. Immun. 62:2885-2892.

17. **Genco, C.A., R.E. Schifferle, T. Njoroge, R.Y. Forng, and C. W. Cutler.** 1995. Resistance of a Tn4351 generated polysaccharide mutant of *Porphyromonas gingivalis* to PMN killing. Infect. Immun. 63:393-401.

18. **Genco, C.A.** 1995. Preface: Molecular and cellular basis for microbial pathogenesis. Adv. Dent. Res. 9:29-30.

19. **Genco, C.A.** 1995. Regulation of hemin and iron transport in *Porphyromonas gingivalis.* Adv. Dent. Res. 9:41-47.

20. **Cutler, C.W., J.R. Kalmar, and C.A. Genco.** 1995. Pathogenic strategies of the oral anaerobe *Porphyromonas gingivalis*. Trends Microbiol. 3:45-51.

21. **Genco, C.A., W. Simpson, R.Y. Forng, and B.M. Odusanya.** 1995. Characterization of a Tn4351 generated hemin uptake mutant of *Porphyromonas gingivalis*: Evidence for the coordinate regulation of virulence factors by hemin. Infect. Immun. 63:2459-2466.

22. **Desai, P.J., R. Nzeribe, and C.A. Genco.** 1995. Characterization of hemin transport in *Neisseria gonorrhoeae.* Infect. Immun. 63:4634-4641.

23. **Lynn, W.H., C.A. Genco, and R.Y. Forng.** 1995. Analysis of the insertion characteristics of Tn*4351* during high frequency transposition of *Porphyromonas gingivalis*. Natl. Dent. Assoc. J. 46:15-17.

24. **Genco, C.A. and P. J. Desai.** 1996. Iron Acquisition in the Pathogenic Neisseria. Trends in Microbiol. 4:179-184.

25. **Cutler, C.W, P. Eke, C. A. Genco, T. E. Van Dyke, and R. Arnold.** 1996. Hemin induced modulation of antigenic determinants on *Porphyromonas gingivalis* LPS. Infect. Immun. 64:2282-2287.

26. **Desai, P.J., A.M. Angerer, and C.A. Genco.** 1996. Analysis of Fur binding to operator sequences within the *Neisseria gonorrhoeae fbpA* promoter. J. Bacteriol. 178:5020-5023.

27. **Forng, R.-Y. C.R. Ekechukwu,, S. Subbarao, S.A Morse and C.A. Genco.** 1997. Promoter mapping and transcriptional regulation of the iron-regulated *Neisseria gonorrhoeae fbpABC* operon. J. Bacteriol. 179:3047-3052.

28. **Njoroge, T., R.J. Genco, H. Sojar, N. Hamada, and C.A. Genco.** 1997. A role for *Porphyromonas gingivalis* fimbriae in invasion of oral epithelial cells. Infect. Immun. 65:1980-1984.

29. **Wang, C.Y., V.C. Bond, and C.A. Genco.** 1997. Characterization of a second *Porphyromonas gingivalis* insertion sequence. J. Bacteriol. 179:3808-3812.

30. **Genco, C.A., B.M Odusanya, J. Mikolajczyk-Pawlinska, J. Potempa, and J. Travis.** 1998. Identification of a peptide domain on arg-gingipain which confers protection against *Porphyromonas gingivalis* infection. Infect. Immun. 66:4108-4114.

31. **Deshpande, R., M.B. Khan, and C.A. Genco.** 1998. Invasion of heart and aortic endothelial cells by *Porphyromonas gingivalis*. Infect. Immun. 66:5337-5343.

32. **Genco, C.A., T. Van Dyke and S. Amar.** 1998. Animal models for *Porphyromonas gingivalis* mediated periodontal diseases. Trends in Microbiol. 6:444-449.

33. **Genco, C.A., Potempa, J., Mikolajczyk-Pawlinska J, and J. Travis.** 1999. Role of gingipains R in *Porphyromonas gingivalis* pathogenesis. Clin. Infect. Dis. 28:56-465.

34. **Genco, C.A. T. Van Dyke, and S. Amar.** 1999. Molecular mechanisms of microbial host cell interactions in periodontal disease. Clin. Infect. Dis. 28:431.

35. **Deshpande, R., M.B. Khan, and C.A. Genco.** 1999. Invasion strategies of the oral pathogen *Porphyromonas gingivalis*: Implications for cardiovascular disease. Invasion Metastasis. 18: 57-69.

36. **Egal, M., M. Conrad, D.L. MacDonald, W.L. Maloy, M. Motley, and C.A. Genco.** Antiviral effects of synthetic membrane active peptides on Herpes Simplex Virus, Type 1. 1999. Int. J. Antimicrobial Agents. 13:57-60.

37. **Holt, S.C., L. Kessavalu, S. Walker, and C.A. Genco.** 1999. Virulence factors of *Porphyromonas gingivalis*. Periodontol 2000. 20:168-238.

38. **Sebastian, S., and C.A. Genco.** 1999. FbpC is not essential for iron acquisition in *Neisseria gonorrhoeae.* Infect. Immun. 67:3141-3145.

39. **Simpson, W., C.Y. Wang, Bond, C., Potempa, J., Mikolajczyk-Pawlinska J, Travis, J. and C.A. Genco.** 1999. Transposition of the endogenous insertion sequence element IS*1126* modulates gingipain expression in *Porphyromonas gingivalis.* Infect. Immun. 67:5012-5020.

40. **Forng, R.Y., C. Champagne, W. Simpson, and C.A. Genco.** 2000. Environmental cues and gene expression in *Porphyromonas gingivalis* and *Actinobacillus actinomycetemcomitans.* Oral Diseases: 6:351-365.

41. **Graves, D., Y. Jiang, and C. A. Genco**. 2000. Periodontal Disease: Bacterial virulence factors, host response and impact on systemic health. Curr. Opin. Infect. Dis. 13:227-232.

42. **Desai, P., I., E. Garges, and C.A. Genco.** 2000. Pathogenic Neisseria can use hemoglobin, transferrin, and lactoferrin independently of the *tonB* locus. J. Bacteriol. 182:5586-5591.

43. **Simpson, W., T. Olczak, and C.A. Genco.** 2000. Characterization and expression of HmuR, a TonB-dependent hemoglobin receptor of *Porphyromonas gingivalis.* J. Bacteriol. 182:5737-5748.

44. **Genco, C.A. and D.W. Dixon.** 2001. Emerging strategies in microbial heme capture. Mol. Microbiol. 39:1-11.

45. **Sroka, A., J. Potempa, J. Travis, and C.A. Genco.** 2001. Degradation of host heme proteins by the lysine and arginine-specific cysteine proteinases (gingipains) of *Porphyromonas gingivalis*: J. Bacteriol. 183:5609-5616.

46. **Olczak, T., D. W. Dixon, and C.A. Genco.** 2001. Binding specificity of the *Porphyromonas gingivalis* heme / hemoglobin receptor HmuR and gingipain K and gingipain R for heme, porphyrins, and metalloporphyrins. J. Bacteriol. 183:5599-5608.

47. **Fichorova, R. N., P. Desai, F. Gibson, and C.A. Genco.** 2001. Distinct proinflammatory host responses to *Neisseria gonorrhoeae* infection in immortalized human cervical and vaginal epithelial cells. Infect. Immun. 69: 5840-5848.

48. **Gibson, F.C. and C. A. Genco.** 2001. Prevention of induced oral bone loss following immunization with gingipain R1. Infect. Immun. 69:7959-7963.

49. **Khlgatian, M., H. Nassar, F. C. Gibson, H. Chou, and C. A. Genco.** 2002. Fimbriae dependent activation of cell adhesion molecule expression in *Porphyromonas gingivalis* infected endothelial cells. Infect. Immun.70:257-267.

50. **Nassar, N., H. Chou, M. Khlgatian, F. Gibson, T. Van Dyke, and C. A. Genco.** 2002. Role for fimbriae and the lysine-specific cysteine proteinase gingipain K in expression of interleukin-8 and monocyte chemoattractant protein in *Porphyromonas gingivalis* infected endothelial cells. Infect. Immun. 70:268-276.

51. **Sebastain, S., J. Murphy, S. Agarwal, and C.A. Genco.** 2002. The gonococcal Fur regulon: Identification of additional genes involved in major catabolic, recombination and secretory pathways. J. Bacteriol. 184:3965-3974.

52. **Niederman R, Kelderman H, Socransky S, Ostroff G, Genco CA, Kent R Jr, and Stashenko P.** 2002. Enhanced neutrophil emigration and *Porphyromonas gingivalis* reduction following PGG-glucan treatment of mice. Arch Oral Biol. 47:613-618.

53. **Genco, C.A., W.L. Maloy, U.P. Kari, and M. Motley.** 2003. Antimicrobial activity of magainin analogues against anaerobic oral pathogens. International J. Antimicrobial Agents. 1:75-78.

54. **Gonzalez, D., F. Gibson, and C.A. Genco**. 2003. Immunization with *Porphyromonas gingivalis* capsular polysaccharide prevents *P. gingivalis*-elicited oral bone loss in a murine model. Infect. Immun. 71:2283-2287.

55. **Grifantini, R., S. Sebastian, E. Frigimelica, M. Draghi, E. Bartolini, A. Muzzi, R. Rappuoli, G. Grandi, and C.A. Genco**. 2003. Identification of novel iron-activated and -repressed Fur-dependent genes by transcriptome analysis of *Neisseria meningitidis* Group B. Proc. Natl. Acad. Sci. 100:9542-9547.

56. **Gyurko R, Boustany G, Huang PL, Kantarci A, Van Dyke TE**, **Genco CA and Gibson FC 3rd.** 2003. Mice lacking inducible nitric oxide synthase demonstrate impaired killing of *Porphyromonas gingivalis*. Infect Immun. 71:4917-4924.

57. **Gibson, F.C., D.A. Gonzalez, J. Wong, and C.A. Genco.** 2004. *Porphyromonas gingivalis*-specific immunoglobulin G prevents *P. gingivalis*-elicited oral bone loss in a murine model. Infect. Immun.72:2408-2411.

58. **Gibson, F.C., Hong, C., Chou, H.H., Yumoto, H., Chen, J., Lien, E., Wong, J. and C.A. Genco.** 2004. Innate immune recognition of invasive bacteria accelerates atherosclerosis in apolipoprotein E-deficient mice. Circulation. 109:2801-2806.

59. **Simpson, W., T. Olczak, and C. A. Genco.** 2004. Heme Acquisition in *Porphyromonas gingivalis* is dependent on both the hemin/hemoglobin receptor, HmuR, and the lysine-specific proteinase gingipain K. Acta. Biochim. Pol. 51:253-262.

60. **Grifantini, R., E. Frigimelica, E. Delany, E. Bartolini, S. Balloni, S. Agarwal, C.A. Genco, and G. Grandi.** 2004. Characterization of a novel *Neisseria meningitidis* Fur and iron-regulated operon required for protection from oxidative stress: Gene function assignment by DNA microarray. Mol. Microbiol. 54:962-979.

61. **Sztukowska, M., A. Sroka, M. M. Bugno, A. Banbula, Y. Takahashi, C.A. Genco, J. Travis and J. Potempa.** 2004. The C-terminal domains of the gingipain K polyprotein are necessary for assembly of the active enzyme and expression of associated activities. Mol. Microbiol. 54:1393-1408.

62. **Liu, X., A. Sroka, J. Potempa, and C.A. Genco.** 2004. Coordinate expression of the *Porphyromonas gingivalis* lysine-specific gingipain protease, Kgp, arginine-specific gingipain proteinase, RgpA, and the heme / hemoglobin receptor, HmuR. Biol. Chem. 385:1049-1057.

63. **Gyurko, R., H. Shoji, R.A. Battaglino, G. Boustany, F.C. Gibson, C.A. Genco, P. Stashenko, and T. E. Van Dyke.** 2005. Inducible nitric oxide synthase mediates bone development and *P. gingivalis*-induced alveolar bone loss. Bone. 36:472-479.

64. **Chou, H-H., H. Yumoto, M. Davey, Y. Takahashi, T. Miyamoto, F.C. Gibson and C.A. Genco.** 2005. *Porphyromonas gingivalis* fimbria-dependent activation of inflammatory genes in human aortic endothelial cells. Infect. Immun. 73:5367-5378.

65. **Gibson, F. C, J. Savelli, T. Van Dyke, and C.A. Genco**. 2005. Gingipain- specific IgG in the serum of human patients with periodontal disease is necessary for opsonophagocytosis of *Porphyromonas gingivalis*. J. Periodont. 76:1629-1636.

66. **Agarwal, S., C. King, E. Klein, D.E. Soper, P. A. Rice, L. M. Wetzler, and C. A. Genco.** 2005. The gonococcal Fur-regulated *tbpA* and *tbpB* genes are expressed during natural mucosal gonococcal infection. Infect. Immun. 73:4281-4287.

67. **Yumoto, H., H.H. Chou, Y. Yakahashi, M. Davey, F.C. Gibson, and C.A. Genco.** 2005. Sensitization of human aortic endothelial cells to lipopolysaccharide via regulation of Toll-like receptor 4 by bacterial fimbria-dependent invasion. Infect. Immun. 73:8050-8059.

68. **Olczak, T. W. Simpson, X. Liu, and C.A. Genco.** 2005. Iron and heme utilization in *Porphyromonas gingivalis.* FEMS Microbiol. Rev. 29:119-144.

69. **Miyamoto, T., H. Yumoto, Y. Takahashi, M. Davey, F.C. Gibson, and C.A. Genco.** 2006. Pathogen-accelerated atherosclerosis occurs early after exposure and can be prevented via immunization. Infect. Immun. 74:1376-1380.

70. **Gibson, F.C., H. Yumoto, Y. Takahashi, H.-H. Chou. and C.A. Genco.** 2006. Innate immune signaling and *Porphyromonas gingivalis*- accelerated atherosclerosis. J. Dent. Res. 85:106-121.

71. **Takahashi, Y., M. Davey, Yumoto, H., F.C. Gibson, and C.A. Genco.** 2006. Fimbria-dependent activation of pro-inflammatory molecules in *Porphyromonas gingivalis* infected human aortic endothelial cells. Cellular Microbiol. 8:738-757.

72. **Liu, X, T. Olczak, H.C. Guo, D.W. Dixon, and C. A. Genco.** 2006. Identification of amino acid residues involved in heme binding and hemoprotein utilization in the *Porphyromonas gingivalis* heme receptor HmuR. Infect. Immun. 74:1222-1232.

73. **Bartolini, E., E. Frigimelica, Y. Shaik, G. Galli, J.A. Welsch, D.M. Granoff, C.A. Genco, G. Grandi, and R. Grifantini.** 2006. Role of FNR and FNR-regulated, sugar fermentation genes in *Neisseria meningitidis* infection. Mol. Microbiol**. 60:**963-972.

74. **Mydel, P., Y. Takahashi, H. Yumoto, M. Sztukowska, M. Kubica, F.C. Gibson, D. Kurtz, J. Travis, C.A. Genco, and J. Potempa.** 2006. Role of the host oxidative immune response and the bacterial antioxidant, rubrerythrin during anaerobic infection. Plos Pathogens. 2:712-725.

75. **Al-Qutub, M.N, Braham, P.H., Karimi-Naser, K., Liu, X, Genco, C.A. and R.P. Darveau.** 2006. Hemin-dependent modulation of the lipidA structure of *Porphyromonas gingivalis* lipopolysaccharide. Infect. Immun. 74:4474-4485.

76. **Yazdani, B.S., S. Grogan, M. Davey, S. Sebastain, B. Szmigielski, and C.A. Genco.** 2007. Expression of the iron-activated *nspA* and *secY* genes in *Neisseria meningitidis* group B by Fur-dependent and independent mechanisms. J. Bacteriol. 189:663-669.

77. **Mellin, J.R., S. Goswami, S. Grogan, B. Tjaden, and C.A. Genco.** 2007. A novel Fur and iron-regulated small RNA, NrrF, is required for indirect Fur-mediated regulation of the *sdhA* and *sdhC* genes in *Neisseria meningitidis*. J. Bacteriol. 189:3683-3694.

78. **Gibson, F.C. and C. A. Genco.** 2007. *Porphyromonas gingivalis* mediated periodontal disease and atherosclerosis: Disparate disease with commonalities in pathogenesis through TLRs. Current Pharmaceutical Design. 13:3665-3675.

79. **Liu, X., T. Ukai, H. Yumoto, M. Davey, F.C. Gibson, and C.A. Genco.** 2008. Toll-like receptor 2 plays a critical role in the progression of atherosclerosis that is independent of dietary lipids. Atherosclerosis. 196:146-154.

80. **Davey, M., X. Liu, T. Ukai, V. Jain, C. Gudino, F.C. Gibson III, D. Golenbock, A. Visintin, and C.A. Genco.** 2008. Bacterial fimbriae stimulate proinflammatory activation in the endothelium through distinct TLRs. J. Immunol. 180:2187-2195.

81. **Gibson III, F.C., T. Ukai, and C.A. Genco.** 2008. Engagement of specific innate immune signaling pathways during *Porphyromonas gingivalis* induced chronic inflammation and atherosclerosis. Frontiers in Bioscience. 13:2041-2059.

82. **Ukai, T., H. Yumoto, T. Miyamoto, F.C. Gibson III, and C.A. Genco.** 2008. Macrophage-elicited osteoclastogenesis in response to bacterial stimulation requires Toll-like receptor 2 dependent tumor necrosis factor-alpha production. Infect. Immun. 76:812-819.

83. **Isabella, V., L. F. Wright, K. Barth, J.M. Spence, S. Grogan, C.A. Genco, and V.L. Clark.** 2008. cis- and trans-acting elements involved in regulation of *norB* (*norZ*), the gene encoding nitric oxide reductase in *Neisseria gonorrhoeae*. Microbiology 154:226-239.

84. **Agarwal, S., S. Sebastian, B. Szmigielski, P. A. Rice, and C. A. Genco.** 2008. Expression of the gonococcal global regulatory Fur, and genes encompassing the Fur and iron regulon during *in vitro* and *in vivo* infection in women. J. Bacteriol. 190:3129-3139.

85. **Blair, P.S, S. Rex, O. Vitseva, L. Beaulieu, K. Tanriverdi, S. Chakrabarti, C. Hayashi, C.A. Genco, M. Iafrati, and J.E. Freedman.** 2009. Stimulation of Toll-like receptor 2 in human platelets induces a thrombo-inflammatory response through activation of phosphoinositide 3-kinase. Cir. Res**.** 104:346-354.

86**. Follows, S., J. Murlidharan, P. Massari, L.M. Wetzler, and C.A. Genco.** 2009. *Neisseria gonorrhoeae* infection protects human cervical epithelial cells from apoptosis via expression of host anti-apoptotic proteins. Infect. Immun. 77:3602-3610.

87. **Hayashi, C., Madrigal, A.G., X. Liu, T. Ukai, S. Goswami, C. Gudino, F.C. Gibson, and C.A. Genco.** 2010. Pathogen mediated inflammatory atherosclerosis is mediated in part via TLR2 induced inflammatory responses. J. Innate Immunity. 2:334-343.

88. **Mellin, J.R., R. McClure, D. Lopez, O. Green, and C. A. Genco.** 2010. Role of Hfq in iron dependent and independent gene regulation *Neisseria meningitidis*. Microbiology. 156:2316-2326.

89. **Hayashi, C., C. Gudino, F.C. Gibson, and C.A. Genco**. 2010. Pathogen-induced chronic inflammation at sites distant from oral infection: Bacterial persistence and modulation of cell specific innate immune inflammatory pathways. Mol. Oral. Microbiol. 25: 305-316.

90. **Hayashi, C., J. Viereck, N. Hua, A.G. Madrigal, F.C. Gibson, J.A. Hamilton, and C.A. Genco.** 2011. *Porphyromonas gingivalis* accelerates inflammatory atherosclerosis in the innominate artery of ApoE deficient mice. Atherosclerosis. 215:52-59.

91. **Lopez, C.A., G.G. Daaboul, S. Ahn, A. P. Reddington, M.R. Monroe, X. Zhang, R.J. Irani, C. Yu, C. A. Genco, M. Cretich, M. Chiari, B. B. Goldberg, J. H. Connor, and M. S. Ünlü.** 2011. Biomolecular detection employing the Interferometric Reflectance Imaging Sensor (IRIS). JoVE Bioengineering.

92. **Yu, C. and C.A. Genco.** 2012. Fur mediated activation of gene transcription in the human pathogen *Neisseria gonorrhoeae*. J. Bacteriol. 194:1730-1742.

93. **Madrigal, A.G., K. Barth, G. Papadolous, and C. A. Genco**. 2012. *Porphyromonas gingivalis* induced proteolysis of the receptor interacting proteins 1 and 2 in human aortic endothelial cells. Plos Pathogens. 6: e1002723.

94. **Yu, C. and C.A. Genco**. 2012. Fur mediated global regulatory circuits. J. Bacteriol. 194:6372-6381.

95. **Hayashi, C., C.V. Gudino, G. Papadopoulos, E. O. Weinberg, K.R. Barth, A.G. Madrigal, M. LaValley, F.C. Gibson, J. A. Hamilton, and C.A. Genco.** 2012. Protective role for TLR4 signaling in atherosclerosis progression as revealed by infection with a common oral pathogen. J. Immunol. 189:3681-3688.

96. **Carrion, J., E. Scisci, B. Miles, G. Sabino, A. Zeituni, Y. Gu, A. Bear, C.A. Genco, D.L. Brown and C.W. Cutler.** 2012. Microbial carriage state of peripheral blood dendritic cells (DCs) in chronic periodontitis influences DC differentiation, atherogenic potential. J. Immunol. 189:3178-318.

97. **Weinberg, E. and C. A. Genco.** 2012. Directing TRAF-ic: Cell specific roles for TRAF6 signaling in chronic inflammation and atherosclerosis. Circulation. 126:1678-1680.

98. **Papadopoulos, G., E.O. Weinberg, P. Massari, F.C. Gibson, L. M. Wetzler, E.F. Morgan, and C.A. Genco.** 2013. Macrophage-specific TLR2 signaling mediates pathogen-induced TNF-dependent inflammatory oral bone loss. J. Immunol. 190:1148-57.

99. **Barth, K., D.G. Remick, and C.A. Genco.** 2013. Disruption of immune regulation by microbial pathogens and resulting chronic inflammation. J. Cell. Physiol. 228:1413–1422.

100. **McClure, R., D. Balasubramanian, Y. Sun, M. Bobrovskyy, P. Sumby, C.A. Genco, C. K. Vanderpool, and B. Tjaden.** 2013. Computational analysis of bacterial RNA-seq data. Nuc Aci Res. Aug 1;41(14):e140.

101. **Miles, B, E. Scisci, J. Carrion, G.J. Sabino, C.A. Genco, and C W. Cutler.** 2013. Noncanonical dendritic cell differentiation and survival driven by a bacteremic pathogen. J. Leukocyte Bio. 94:281-289.

102. **Daou, N., C. Yu, R. McClure, C. Gudino, and C. A. Genco.** 2013. Neisseria prophage implicated in gonococcal pathogenesis. Infect. Immun. 81:3652-3661.

103. **Beaulieu, L.M., E. Lin, E. Mick, M. Koupenova, E. Weinberg, C. D. Kramer, C.A. Genco, K. Tanriverdi, M. G. Larson, E.J. Benjamin, and J. E Freedman.** 2014. IL1R1 and IL1ß regulate megakaryocyte maturation, platelet activation, and transcript profile during inflammation in mice and humans. ATVB: 34:552-564.

104. **Shaik-Dasthagirisaheb Y.B., N. Huang, E. O. Weinberg, S.S. Shen, C. A. Genco and F. C. Gibson.** 2014. Aging and contribution of MyD88 and TRIF in expression of TLR pathway associated genes to *Porphyromonas gingivalis*. J. Perio Res: doi: 10.1111/jre.12185.

105. **Yu, C., C. A. Lopez, H. Hu, Y. Xia, D. S. Freedman, A. P. Reddington, G. G. Daaboul, M. S.Ünlü, and C. A. Genco.** 2014. A high-throughput method to examine protein-nucleotide interactions identifies targets of the bacterial transcriptional regulatory protein Fur. Plos One: 9: e96832

106. **Slocum, C., S. R. Coats, N. Hua, C. Kramer, G. Papadopoulos, E. O. Weinberg, C. V. Gudino, J. A. Hamilton, R. P. Darveau, and C. A. Genco.** 2014. Distinct lipid A moieties contribute to pathogen-induced site-specific vascular inflammation. Plos Pathogens: 10(7):e1004215. PMCID: 4092147.

107. **Papadopoulos, G., C. Slocum, E. O. Weinberg, N. Hua, C. Gudino, J.A. Hamilton and C. A. Genco.** 2014. A mouse model for pathogen-induced chronic inflammation at local and systemic sites. J Vis Exp. Aug 8;(90). doi: 10.3791/51556.

108. **McClure, R., B. Tjaden, and C.A. Genco.** 2014. Identification of sRNAs expressed by the human pathogen *Neisseria gonorrhoeae* under disparate growth conditions. Frontiers in Microbiol. Aug 28 doi: 10.3389/fmicb.2014.00456.

109. **Slocum, C., and C. A. Genco.** 2014. Bacterial lipid A: The link between infection with a common oral pathogen and atherosclerosis. Clinical Lipidology: 9:509-602.

110. **Kramer C.D. , E. O. Weinberg, A.C. Gower, X. He, S. Mekasha, C. Slocum, L. M. Beaulieu, L. Wetzler, Y. Alekseyev, F. C. Gibson, J. E. Freedman, R. R.Ingalls. and C. A. Genco.** 2014. Distinct gene signatures in aortic tissue from ApoE mice exposed to pathogens or western diet.*BMC Genomics* 15:1176.

111. **Shaik-Dasthagirisaheb, Y. B., N. Huang, E.O. Weinberg, S.S. Shen, C.A. Genco, and F.C. Gibson.** 2015. Aging and contribution of MyD88 and TRIF to expression of TLR pathway-associated genes following stimulation with *Porphyromonas gingivalis*. J Periodontal Res. 50:89-102.

112. **El-Awady, A.R., B. Miles, E. Scisci, Z.B. Kurago, C. D. Palani, R. M. Arce, J. L. Waller, C.A. Genco, C.S. Slocum, M. Manning, P.V. Schoenlein, and C. W. Cutler. 2015.** *Porphyromonas gingivalis* evasion of autophagy and intracellular killing by human myeloid dendritic cells involves DC-SIGN-TLR2 crosstalk. Plos Pathogens. 10(2):e1004647. doi: 10.1371/journal.ppat.1004647

113. **Nudel, K., P. Massari, and C.A.Genco.** 2015. *Neisseria gonorrhoeae* modulates cell death in human endocerivcal epitheial cells through export of exosome associated cIAP2. Infect Immun. Sep; 83(9):3410-7. PMID: 26077759

114. **McClure, R., K. Nudel, P. Massari, B.Tjaden, X.Su, P.A. Rice, and C.A. Genco**. 2015. The gonococcal transcriptome during infection of the lower genital tract in women. Plos One: DOI:10.137 /journal.pone.0133982.

115. **Beaulieu, L. M., L. Clancy, K Tanriverdi, E. J. Benjamin, C. D. Kramer, E.O. Weinberg, X. He, S. Mekasha, A. C. Gower, E. Mick, R. Ingalls, C.A. Genco, and J. E. Freedman** 2015. Specific inflammatory stimuli lead to distinct platelet responses in mice and humans. Plos One. DOI:10.1371/journal.pone.0131688

116. **Cattley, C., P. Massari, and C.A. Genco.** 2015. Incidence of Gonorrhea and Chlamydia in urban settings: The case of neighborhood level analysis in Boston. Adv. Infectious Dis. 5:162-166.

117. **Slocum C., C. Kramer, and C.A. Genco.** 2016. Immune dysregulation mediated by the oral microbiome: potential link to chronic inflammation and atherosclerosis**.** J Intern Med 280(1):114-28. doi: 10.1111/joim.12476.

118. **Yu, C., R. McClure, K. Nudel, N. Daou, and C.A. Genco.** 2016. Characterization of the *Neisseria gonorrhoeae* iron and Fur regulatory network. J. Bacteriol. doi:10.1128/jb.00166-16. PMCID: PMC4966432.

119. **Michaud, D.S., K.T. Kelsey, E. Papathanasiou, C.A. Genco, and E. Giovannucci.** 2016. Periodontal disease and risk of all cancers among male never smokers: an update analysis of the health professionals follow up study. Annals of Oncology *doi: 10.1093.*

120. **Barth, K. and C.A. Genco**. 2016. Microbial degradation of cellular kinases impairs innate immune signaling and paracrine TNFα responses. Scientific Reports. doi:10.1038.

121. **Stanford, E.A., A. Ramirez-Cardenas, Z. Wang, O. Novikov, K. Alamoud, P. Koutrakis, J.P. Mizgerd, C.A Genco, M. Kukuruzinska, S. Monti, M. V. Bais, and D. H Sherr.** 2016. Role for the aryl hydrocarbon receptor and diverse ligands in oral squamous cell carcinoma migration and tumor genesis. Molecular Cancer Research. *doi: 10.1158/1541-7786.*

122. **Kramer, C.D. and C.A. Genco.** 2017. Microbiota, Immune subversion, and chronic inflammation. Front. Immunol. 8:255. *doi:10.3389/fimmu.2017.00255.*

123. **Kramer, C.D., A.M. Simas, X. He, R.R. Ingalls, E.O. Weinberg, and C.A. Genco.** 2017. Distinct roles for dietary lipids and *Porphyromonas gingivalis* infection on atherosclerosis progression and the gut microbiota. Anaerobe. /doi.org/10.1016/j.anaerobe.2017.04.011.

124. **Moreau, M. P. Massari, and C.A. Genco.** 2017. The ironclad truth: how *in vivo* transcriptomics and *in vitro* mechanistic studies shape our understanding of *Neisseria gonorrhoeae* gene regulation during mucosal infection. Pathogens and Disease: FEMS *doi: 10.1093/femspd/ftx057.*

125. **Ritter, J.L. and C.A. Genco.** 2018. *Neisseria gonorrhoeae* induced inflammatory pyroptosis in human macrophages is dependent on intracellular gonococci and lipooligosaccharide. J. Cell Death. doi.org/10.1177/1179066017750902.

126. **Nudel, K., R. McClure, M. Moreau, E. Briars, A. J. Abrams, B. Tjaden, X.H. Su, D. Trees, P. A. Rice, P. Massari, and C.A. Genco.** 2018. Transcriptome analysis of *Neisseria gonorrhoeae* during natural infection reveals differential expression of antibiotic resistance determinants between men and women. mSphere: doi: 10.1128/.00312-18

127. **Yost, S., P. Stashenko, Y. Choi, M. Kukuruzinska, C.A. Genco, A. Salama, E.O. Weinberg, C.D. Kramer, and J. Frias- Lopez.** 2018. Increased virulence of the oral microbiome in oral squamous cell carcinoma revealed by metatranscriptome analyses. International Journal of Oral Science. 10:32; https://doi.org/10.1038/s41368-018-0037-7.

128. **McClure, R. and C.A. Genco.** 2019. Strategies for global RNA sequencing of the human pathogen *Neisseria gonorrhoeae.* Methods Mol Biol. 2019;1997:163-183.

129. **Coats, S. R., N. Kntrong, T.T. To, S. Jain, C.A. Genco, J.S. McLean, R. P. Darveau.** 2019. The distinct immune-stimulatory capacities of *Porphyromonas gingivalis* strains 381 and ATCC33277 are determined by the *fimB* allele and gingipain activity. Infection and Immunity, 87:e00319-19. https://doi.org/10.1128/IAI.00319-19.

130. **Zhu, T., R. McClure, O.B. Harrison, C.A. Genco, P. Massari**. 2019. Integrated bioinformatic analyses and immune characterization of new *Neisseria gonorrhoeae* vaccine antigens expressed during natural mucosal infection. Vaccines 7,153;doi:10.3390/vaccines7040153.

131. **Harrison O.B., Cehovin A, Skett J, Jolley K.A., Massari P, Genco C.A., Tang C.M., Maiden M.C.J.** 2020. *Neisseria gonorrhoeae* population genomics: Use of the gonococcal core genome

to improve surveillance of antimicrobial resistance. J Infect Dis. 222(11):1816-1825. PMCID: PMC7653085.

132. **McClure, R., A. Sunkavalli, P.M. Balzano, P. Massari, C. Cho, W.M. Nauseef, M.A. Apicella, and C.A. Genco.** 2020**.** Global network analysis of *Neisseria gonorrhoeae* identifies coordination between pathways, processes, and regulators expressed during human infection. mSystems. doi:org/10.1128mSystems.00729-19.

133**. Papadopoulos G, R. Berland, A. Sunkavalli, S.R. Coats, R. P. Darveau, and C. A. Genco.** 2021. Microbial Lipid A remodeling controls cross-presentation efficiency and CD8 T cell priming by modulating dendritic cell function. Infect. Immun. Jan 19; doi: 10.1128/IAI.00335-20. PMID: 33257533.

134. **Le W, Su X, Lou X, Li X, Gong X, Wang B, Genco C.A., Mueller J.P., Rice P.A.** 2021. Susceptibility trends of Zoliflodacin against multidrug-resistant *Neisseria gonorrhoeae* clinical isolates in Nanjing, China, 2014 to 2018. Antimicrob Agents Chemother. Feb 17;65(3):e00863-20. doi: 10.1128/AAC.00863-20. Print 2021 Feb 17. PMID: 33318010.

135. **Costa-Lourenço A.P.R, Su X., Le W., Yang Z., Patts G. J., Massari P., Genco C.A**. 2021. Epidemiological and clinical observations of gonococcal infections in women and prevention strategies. Vaccines 9: 4, 327. doi.org/10.3390/vaccines9040327. PMID: 33915835

136. **Criss, A. K., Genco, C.A., Gray-Owen, S.D., Jerse, A.E., and H. Seifert**. 2021. Challenges and controversies concerning *Neisseria gonorrhoeae*-neutrophil interactions in pathogenesis. mBio 12:e00721-21. https://doi.org/10.1128/mBio.00721-21. PMID: 34060328

137. **Simas A.M., Kramer C.D., Weinberg E.O., Genco C.A.** 2021**.** Oral Infection with a periodontal pathogen alters oral and gut microbiomes. Anaerobe. Jun 3:102399. doi: 10.1016/j.anaerobe.2021.102399.PMID: 34090994.

138. **Simas, A.M., Crott, J.W., Sedore, C., Rohrbach, A., Monaco, A.P., Gabriel, S., Lennon, N., Blumenstiel, B., and C.A. Genco.** 2021. Polling for SARS-CoV2 surveillance: Validation and strategy for implementation in K-12 schools. Frontiers Public Health.doi:10.3389/pubh.2021.789402. PMID: 34976934

139. **Simas, A.M., Kramer, C.D., and C. A. Genco.** 2022. Diet-induced nonalcoholic fatty liver disease and associated gut dysbiosis are exacerbated by oral infection. Frontiers in Oral Health. doi: 10.3389/frpj.2021.784448. PMID: 35141703

140. **Papadopoulos, G., E.O. Weinberg, P. Massari, F.C. Gibson, L. M. Wetzler, E.F. Morgan, and C.A. Genco.** 2022. Correction: Macrophage-specific TLR2 signaling mediates pathogen-induced TNF-dependent inflammatory oral bone loss. J Immunol. doi:10.4049/jimmunol.2200589. Epub 2022 Sep 9. PMID: 36165174

141. **Sunkavalli, A., R. McClure, and C.A. Genco.** 2022. Molecular regulatory mechanism drive pathogenic properties of *Neisseria gonorrhoeae*. Microorganisms. 10,922. Doi.org/10.3390/microorganisms10050922.

142. **Ngwenyama, N., K. Kaur, D. Bugg, B. Theall, M. Aronovitz, R. Berland, S. Panagiotidou, C. Genco, M. A. Perrin, J. Davis, and P. Alcaide.** 2022. Antigen presentation by cardiac

fibroblasts promotes cardiac dysfunction. Nat Cardiovasc Res. doi: 10.1038/s44161-022-00116-7. Epub 2022 Aug 12. PMID: 36092510

Complete List of Published Work in My Bibliography:
https://www.ncbi.nlm.nih.gov/sites/myncbi/caroline.genco.1/bibliography/44227251/public/?sort=date&direction=ascending

Books

1. **Genco, C.A. and R.J. Arko.** 1993. Animal chamber models for the study of host-parasite interactions. In: Bacterial Pathogenesis. Identification and regulation of virulence factors. Methods in Enzymology. Part A. **235:** pg. 120-140.

2. **Morse, S.A. and C.A. Genco.** 1997. *Neisseria*. Topley & Wilson's Microbiology and Microbial Infections. Ninth Edition. Volume **2** pg: 877-900.

3. **Gibson, F.C. and C.A. Genco. 2003.** The genus *Porphyromonas*. In: The Prokaryotes.3rd edition. Springer-Verlag, New York.

4. **Genco, C.A., W. Simpson, and T. Olczak**. 2004. Heme capture in *Porphyromonas gingivalis*. In: Iron transport in bacteria: Molecular genetics, biochemistry, microbial pathogenesis and ecology. J. Crosa and S. Payne, Editors, American Society for Microbiology Press, Washington, D.C. pg. 329-343.

5. **Genco, C.A. and F.C. Gibson, III.** 2004. Infection and Atherogenesis. In: Molecular mechanisms in atherosclerosis. J. Loscalzo, Editor. pg. 237-260.

6. **Genco, C.A. and L. Wetzler,** 2010. Editors. Neisseria- Molecular Mechanisms of Pathogenesis. Horizon Scientific Press, Norwich, UK

7. **Daou, N., R. McClure, and C.A. Genco**. 2014. Transcriptional regulatory proteins in the pathogenic Neisseria. In: Pathogenic Neisseria: Genomics, Molecular Biology, and Diseases. Horizon Scientific Press, Norwich, UK

Invited Presentations (since 2011)

03/11 Pathogen mediated chronic immune stimulation defines TLR specific immunoregulatory events that promote atherosclerosis progression. Immunology Training Program Boston University School of Medicine, Boston, MA

04/11 Pathogen mediated TLR evasion strategies that promote chronic inflammation at sites distant from infection. Loma Linda University, Loma Linda, CA

04/11 Infection and inflammation take their Toll on atherosclerosis. Boston University Whittaker Cardiovascular Institute, Boston, MA

11/11 Infection and inflammation take their Toll on atherosclerosis. Georgia Health Sciences University, Augusta, GA

01/12 Chronic immune stimulation by a common oral pathogen links infection and atherosclerosis. Department of Medicine, Section of Infectious Diseases, Boston University School of Medicine, Boston, MA

02/12 Pathogen dissemination and chronic immune activation: A mechanistic link in inflammatory atherosclerosis. Oral Immunology Microbiology Research Group Meeting, Aruba

05/12 Chronic immune stimulation by a common oral pathogen links infection and atherosclerosis. University of Seattle, Seattle, WA

07/12 Chronic immune stimulation by a common oral pathogen links infection and atherosclerosis. Georgia Health Sciences University, Augusta, GA

02/13 Let's get tipsy: *P. gingivalis* tips the balance between TLR2 and TLR4 signaling. Oral Immunology Microbiology Research Group Meeting, Puerto Rico

05/13 RNA-seq analysis of vaginal lavage samples from female patients identifies a repertoire of putative gonococcal vaccine targets. International Congress on Meningococcal Disease Vaccines. Neisseria Vaccines. 2013. Varadero, Cuba

10/13 Inflammation at a distance. Frontiers in Mucosal Immunology-Dysbiosis and Disease Pathogenesis Symposium, Harvard Medical School, Boston, MA

02/14 Location Matters: Lipid A moieties define site-specific vascular inflammation. Oral Immunology Microbiology Research Group Meeting, St. Croix, US Virgin Islands

02/14 Identification of novel gonococcal genes selectively expressed during natural infection in women: Role of microbial and host specific factors. 2014 Annual Meeting of the NIH Sexually Transmitted Infections Cooperative Research Centers, Cambridge, MA

03/14 Location matters: Pathogen mediated inflammation at a distance. Department of Pathology, University of Utah, School of Medicine, Salt Lake City, UT

06/14 Distinct immune evasion mechanisms define pathogen induced chronic inflammation at sites distant from infection. 11th International Conference on Innate Immunity. Olympia, Greece

07/14 Pathogen induced vascular inflammation at sites distant from infection, Microbial Toxins & Pathogenicity Gordon Research Conference. Waterville Valley, NH

07/14 Pathogen mediated immune dysregulation links chronic inflammation and atherosclerosis progression. Department of Integrative Physiology and Pathobiology, Tufts University School of Medicine, Boston, MA

10/14 Characterization of the complete gonococcal transcriptome during natural mucosal infection International Pathogenic Neisseria Meeting, Asheville, NC

10/14 Association of periodontal and atherosclerotic vascular disease. Cardiology Grand Rounds, Boston University School of Medicine, Boston, MA

01/15 Pathogen mediated immune dysregulation links inflammatory pathology at sites distant from infection. Department of Microbiology and Immunology University of Texas Health Science Center, San Antonio, San Antonio, TX

03/15 Pathogen mediated immune dysregulation links inflammatory pathology at sites distant from infection. Department of Microbiology and Immunology, State University of New York at Stony Brook, Stony Brook, NY

06/15 Disruption of immune homeostasis in pathogen induced inflammatory atherosclerosis. PG London. London, UK

06/15 Pathogen mediated immune dysregulation links inflammatory pathology at sites distant from infection. Penn Perio Conference, Philadelphia, PA

07/15 Microbiome, innate immunity and cardiovascular disease. American Heart Association Meeting, Orlando, FL

07/15 Disruption of immune homeostasis in pathogen induced inflammatory atherosclerosis. Virginia Commonwealth University, Richmond, VA

03/16 Disruption of immune homeostasis in pathogen induced inflammatory atherosclerosis. Molecular Cardiology Research Institute at Tufts Medical Center, Boston, MA

05/16 Keynote, Scientific Presentation for Inflammation Day at Tufts University, Grafton, MA

05/16 Disruption of immune homeostasis in pathogen induced inflammatory atherosclerosis. Scientific Presentation Jackson Research Laboratories, Bar Harbor, ME

05/16 Disruption of immune homeostasis in pathogen induced inflammatory atherosclerosis. Vision Retreat, Tufts Medical Center, Boston, MA

06/16 Disruption of immune homeostasis in pathogen induced inflammatory atherosclerosis. Keynote Scientific Presentation, Cancer Center Retreat, Tufts Medical Center, Boston, MA

07/16 Oral microbes drive immune dysregulation associated with atherosclerosis progression. Annual Meeting of the Anaerobe Society, Nashville, TN

07/16 Microbes and lipids drive immune dysregulation in atherosclerosis. Cummings School for Veterinary Medicine, Tufts University, Grafton, MA

09/16 Identification of new therapeutic targets based on transcriptome analysis of gonococci during natural mucosal infection in men and women. International Pathogenic Neisseria Meeting, Manchester, UK

10/16 Sex as a variable: Transcriptome analysis of gonococci during natural mucosal infection in men and women. Department of Microbiology and Molecular Biology, Tufts University School of Medicine, Boston, MA

01/17 Sexually transmitted infections: Approaches to therapy. Shenzhen Hospital, Shenzhen, China

01/17 Sexually transmitted infections: Approaches to therapy. Institute for Dermatology, Nanjing, China

02/17 Microbial disruption of TLR4 signaling in dendritic cells: Implications for chronic inflammation. Annual Meeting of the Oral Microbiology and Immunology group. St. Croix

02/17 Microbiota, immune subversion and chronic inflammation. Department of Microbiology and Immunology, University of Rochester School of Medicine, Rochester, NY

05/17 Microbiota, immune subversion, and chronic inflammation. Jackson Laboratory for Genomic Medicine, Farmington, CT

09/17 Identification of New therapeutic targets: Transcriptome analysis of gonococci during natural mucosal Infection. Shenzhen, China

01/18 Immune subversion by a common pathobiont modulates host immunity & chronic inflammatory responses. Department of Microbiology and Immunology, Harvard Medical School, Boston, MA

02/18 Microbial vectors engineered to modulate antigen specific immune responses for targeted immunotherapy. Annual Meeting of the Oral Microbiology and Immunology group. Cancun, Mexico.

03/18 Immune subversion by a common pathobiont modulates host immunity & chronic inflammatory responses. Department of Biochemistry, Boston University School of Medicine, Boston, MA

05/18 Sex as a variable: Distinct gonococcal gene signatures expressed during human mucosal infection in men and women. Department of Microbiology and Immunology, University of Texas at San Antonio, San Antonio, TX

06/18 Sex as a variable: Distinct gonococcal gene signatures expressed during human mucosal infection in men and women, Department of Microbiology and Immunology, University of Wurzburg, Wurzburg, Germany

09/18 Human mucosal gonococcal infection and pathogenesis, International Pathogenic Neisseria Meeting, Monterey, CA

02/19 Shifting oral and gut communities to promote systemic health. 18th Annual Mark Wilson Conference, Key Largo, FL

03/19 Sex matters- Expression of antimicrobial resistance genes during gonorrhea infection in men and women. Stuart Levy Symposium, Tufts University School of Medicine, Boston, MA

03/19 Sex as a variable: Distinct gonococcal gene signatures expressed during mucosal infection in men and women. Medical University of South Carolina, Charleston, SC

06/19 Sex as a variable: Distinct gonococcal gene signatures expressed during mucosal infection in men and women. Reproductive Immunology Meeting, Grand Rapids, MI

09/19 Sex as a variable: Distinct gonococcal gene signatures expressed during mucosal infection in men and women. International Forum on Gonococcal Research, Suzhou, China

10/19 Sex as a variable: Distinct gonococcal gene signatures expressed during mucosal infection in men and women. New Jersey Medical School, Rutgers, The State University of New Jersey, Newark, NJ

02/20 Sex as a variable: Distinct gonococcal gene signatures expressed during mucosal infection in men and women. 19th Annual Mark Wilson Conference, San Juan, Puerto Rico

03/20 The Impact of oral health research on the healthy lifespan, Bates-Andrews Research Day, Tufts University School of Dental Medicine, Boston, MA

07/20 Oral Dysbiosis and Systemic Disease. Anaerobe 2020, Virtual Meeting

10/20 Natural mucosal gonococcal infection: New directions for gonorrhea control. Ngo Research Society, Virtual Meeting

11/20 Oral infection, gut microbiota and atherosclerosis. American Heart Association, Virtual Meeting

02/21 *P. gingivalis*-mediated disruption of bacterial oral and gut communities - Impact on systemic health. 20th Annual Mark Wilson Conference, Virtual Meeting

10/22 Gene co-expression network analysis reveals coordinated interspecies transcriptional responses during *Neisseria gonorrhoeae* human infection. International Pathogenic Neisseria Meeting, Cape Town, South Africa - Virtual presentation