**CURRICULUM VITAE**

**PERSONAL INFORMATION:**

Name: Ping Xu

Title: Professor with tenure

Address: 521 North 11th Street, Wood Building 424,

Philips Institute for Oral Health Research,

Center for the Study of Biological Data,

Microbiology and Immunology Department,

Virginia Commonwealth University, Richmond, VA 23298-0566

Business Phone: 804-827-6264

Business E-mail: pxu@vcu.edu

Lab Web Page: <http://www.people.vcu.edu/~pingxu/>

**PROFESSIONAL SUMMARY:**

Department Appointment: The Philips Institute For Oral Health Research, Department of Microbiology and Immunology, and Center for Biological Data Science.

Areas of expertise and interest: Microbiome/Genomics, Systems biology, Biofilm and Infectious disease, Streptococcus and pathogenesis.

**EDUCATION:**

1997.5-1999.5, Postdoctoral fellow, Virginia Commonwealth University, Microbial genomics.

1994.7-1996.9, Visiting Professor, Rockefeller Foundation Professorship, Purdue University, Plant pathogens,

1986.8-1989.12, Ph.D., Sino-British Joint Education, Oxford University UK/Nanjing University China, Molecular Biology

1983.8-1986.6, Master of Sciences, Nanjing University, Biology

1978.10-1982.6, Bachelor of Sciences, Nanjing University, Biology

**CERTIFICATION AND LICENSURE (including dates)**

Licensure: N/A

Certification: N/A

**ACADEMIC APPOINTMENT HISTORY**

2014-present Professor, Philips Institute of Oral Health Research, Virginia Commonwealth University, Virginia, USA

2014-present Professor, Microbiology and Immunology Department, Virginia Commonwealth University, Virginia, Affiliate Member,

2002-present Member, the Center for the Study of Biological Complexity, Virginia Commonwealth University, Virginia, USA

2003-2013 Associate Professor, Philips Institute for Oral Health Research, Virginia Commonwealth University, Virginia, USA

1999-2003 Assistant Professor, Microbiology and Immunology Department, Virginia Commonwealth University, Virginia, USA

1992-1997 Associate Professor, Biotechnology Institute, Zhejiang Agriculture University (was separated from and now merged back to Zhejiang University), China.

1990-1991 Assistant Professor, Biotechnology Institute, Zhejiang (Agriculture) University, China.

**EMPLOYMENT HISTORY INCLUDING SIGNIFICANT WORK EXPERIENCE**

2014-present Affiliate Member, Massey Cancer Center, Virginia Commonwealth University, Virginia, USA

2014-present Affiliate Professor, Microbiology and Immunology Department, Virginia Commonwealth University, Virginia, USA

2014-present Full Professor with tenure, Philips Institute for Oral Health Research, Virginia Commonwealth University, Virginia, USA

2004-2013 Affiliate Associate Professor, Microbiology and Immunology Department, Virginia Commonwealth University, Virginia, USA

2003-2013 Associate Professor, Philips Institute for Oral Health Research, Virginia Commonwealth University, Virginia, USA

2002-present Member, the Center for the Study of Biological Complexity, Virginia Commonwealth University, Virginia, USA

1999-2003 Assistant Professor, Microbiology and Immunology Department, Virginia Commonwealth University, Virginia, USA

1997-1999 Senior Fellow, Microbiology and Immunology Department, Virginia Commonwealth University, Virginia, USA

1994-1996 Visiting Professor Scholarship, Plant Stress Center, Purdue University, West Lafayette, Indiana, U.S.A.

1992-1997 Multiple Zhejiang Agriculture University Committees, the Scientific Research Committee, Graduate Study Committee, University Steering Committee, etc.

1992-1997 Multiple grant reviewer and committee member for many fund agencies, National Science Foundation, Zhejiang Science and Technology Commission, Zhejiang Education Commission.

1992-1997 Chinese Society for Biotechnology. The General Secretary of Biotechnology Society, Zhejiang Branch

1992-1997 Associate Professor, Biotechnology Institute, Zhejiang Agriculture University, China.

1992-1997 Executive Deputy Director, Biotechnology Institute, Zhejiang Agriculture University, China.

1991-1997 Executive Deputy Director of the Chinese Agriculture Ministry's Key Laboratory of Plant Pathology and Biotechnology.

1990-1991 Assistant Professor, Biotechnology Institute, Zhejiang Agriculture University, China.

**HONORS AND AWARDS:**

2015 Research award, the Center for the Study of Biological Complexity, Life Sciences, Virginia Commonwealth University

2012 Magazine Research Highlight: Integrative Investigation of A Model Pathogen, Title: Profile of Pathogen. In International Innovation-Disseminating Science, Research and Technology, Oct 2012, p 126-128. Europe Scientific Magazine. This is a research highlight article for our important research advance.

2011 Chairing search committee for Systems Biologist in CSBC, VCU

2010 Magazine Research Introduction: Genetics of Oral Health, Title: Regulation of Fitness and Virulence in Oral Streptococci. In International Innovation-Disseminating Science, Research and Technology,, A Europe's Leading Portal for Scientific Dissemination, Oct 2010, p24-26. This is an introduction of Ping Xu’s researches.

2008 Research Award for recognition of outstanding effort and achievement in research, School of Dentistry, Virginia Commonwealth University

2005 The honor professor, College of Medicine, Zhejiang University, Hangzhou, China

2002 The honor professor, College of Biotechnology and Agriculture, Zhejiang University, Hangzhou, China

1997 The Second Class National Ministry of Education Teaching Achievement Award

1997 100 Leading Scientists for the 20th century Science and Technology, Zhejiang Province

1997 Third Class of Zhejiang Province Science and Technology Progress Award

1997 Third Class Award of Education Commission, Zhejiang Province

1997 The Rockefeller Foundation Career Fellowship, Plant Pathology Department, University of California, Davis, CA, U.S.A.

1994 Rockefeller Foundation, Visiting Professorship, Plant and Environment Stress Center, Purdue University, West Lafayette, Indiana, U.S.A.

1994 First Class Editor Award from the Chinese Science and Technology Press, P.R. China.

1994 Second Class Award for Scientific Paper in Zhejiang Province.

1993 Coordinator and the chief lecturer of a series of Workshops entitled "The Genetic Engineering and the Principles of Recombinant DNA".

1993 The Distinguished Teacher Award, Zhejiang Agriculture University

1987 Scholarship of the Sino-British Joint Education Program with UK.

1986 The "New Star" Outstanding Graduate Student Award, Nanjing University.

1983 The "Excellent Graduate Student” Award, Nanjing University.

1978-1982 The “Excellent Student” Award, for every year, Nanjing University.

**MEMBERSHIP IN SCIENTIFIC OR PROFESSIONAL SOCIETIES:**

2011-present American Association for the Advancement of Science

2005-present American Society for Microbiology

1992-1997 Chinese Society for Biotechnology. The General Secretary of Biotechnology Society, Zhejiang Province

1994-1997 American Society for Plant Physiology

1986-1989 Chinese Young Phycological Scientist Society, President.

**SCIENTIFIC AND SCHOLARLY ACTIVITIES**

2023 ad hoc NIH Study Sections, ODCS

2023 ad hoc NIH Study Sections, ZRG1 IIDA-G (80) Bacterial Pathogenesis

2022 ad hoc NIH Study Sections, ZRG1 IDIA-Y (80) Bacterial Pathogenesis

2021 ad hoc NIH Study Sections, ZRG1 MOSS-L (02)

2019 ad hoc NIH Study Sections, ZDE1 GZ 13

2019 ad hoc NIH Study Sections, ZRG1 MOSS-R(02)

2018 ad hoc NIH Study Sections, 2018, ZDE1 GE(06).

2018 Promotion committee, Dr. Sompop Bencharit, Department of General Practice and Department of Oral & Maxillofacial Surgery, School of Dentistry, VCU

2018 Promotion committee, Dr. Zhao Lin, Periodontics Department, School of Dentistry, VCU

2018 ad hoc NIH Study Sections, 2018 ZDE1 GZ3,

2017 ad hoc NIH Study Sections, 2018 ZDE1 GZ (09) 2

2017 ad hoc Grant Review for MRC, UK

2017 Promotion committee, Dr. Sompop Bencharit, Department of General Practice and Department of Oral & Maxillofacial Surgery, School of Dentistry, VCU

2017 Promotion committee, Dr. Sinem Esra Sahingur, Periodontics Department, School of Dentistry, VCU

2017 Promotion committee, Dr. Chunhao Li, Oral and Craniofacial Molecular Biology, VCU

2017 ad hoc NIH Study Sections, 2017 ZDE1 GZ (04)

2017 ad hoc NIH Study Sections, ODCS

2016 Promotion committee, Dr. Todd Kitten, Oral and Craniofacial Molecular Biology, VCU

2015 ad hoc NIH Study Sections,

2014 Promotion committee, Chair, Dr. Peter Uetz, Center for Study of Biological Complexity, VCU

2014 Promotion committee, Dr. Shunlin Ren, Department of Internal Medicine, VCU

2014 ad hoc NIH Study Section, 2014/10 ZRG1 F10B-B (90) L

2014 ad hoc NIH Study Section, 2014/10 DSR L

2013-Present, Center for Clinical and Translational Research Endowment Fund Advisory Committee, VCU

2013 ad hoc NIH Study Section, 2013/10 ZRG1 IDM-S (02) M

2012-Present, Grant review for Chinese National Science Foundation Grants.

2012-Present, Bioinformatics Program Committee. VCU

2011-Present, Scientific Reports Editorial Board (Nature Publishing Groups)

2011-Present, PLoS ONE Editorial Board (Public Library of Science)

2011-Present, NextGen and Genomics Faculty Advisory Committee, VCU

2010-present Grant Reviewer, Italian Ministry of Health

2011-2013, AD Williams Trust Fund Advisory Committee, VCU

2011 ad hoc NIH Study Sections, DSR

2010 ad hoc NIH Study Sections, ZRG1 MOSS K(03)

2009 ad hoc grant reviewer for Jeffress Trust,

2008-2013, University Graduation Committee, VCU

2007-present, School of Dentistry Research Committee, VCU

2005-2009, American Heart Association Grant Review Mid-Atlantic Study Section 3

1997 the Steering/Program Committee for the 3rd Hangzhou International Symposium on Plant Pathology and Biotechnology

1992-1997, University Scientific Research Committee, Zhejiang Agriculture University

1992-1997, University Graduation Committee, Zhejiang Agriculture University

1994 the Steering/Program Committee for the 2nd Hangzhou International Symposium on Plant Pathology and Biotechnology

1993-1997 Reviewer for Chinese National Science Foundation Grant.

1993-1997 Organizer and chief lecture for national workshops “ The Genetic Engineering and the Principles of Recombinant DNA”

1993-1997 Executive Deputy Director of the Chinese Agriculture Ministry's Key Laboratory of Plant Pathology and Biotechnology.

1992-1997 Executive Deputy Director Biotechnology Institute, Zhejiang Agriculture University.

1991-1997 Reviewer for Science and Technology Grant, Zhejiang Province

1991 the Steering/Program Committee for the 1st Hangzhou International Symposium on Plant Pathology and Biotechnology

1990-1992 Coordinator for Establishing Biotechnology Institute at Zhejiang Agriculture University.

1990-1997 Member, Zhejiang Agriculture University, Molecule biologist search committee

**GRANTS AND CONTRACTS:**

Active

R01DE030121 Ping Xu, Todd Kitten 8/3/2021-7/31/2026

NIDCR $2,700,000

Oral Streptococcal Fitness And Virulence genes

This project is to study virulence genes of oral streptococcus for infective endocarditis by systems biology.

Role: Principle investigator

R01DE028915 Zhao Lin (PI) 03/01/2020-02/28/2025

NIDCR $1,900,000

Epigenetic Regulation Of Periodontal Inflammation

This project is to study Epigenetic regulation for inflammatory gene expression.

Role: Co-Investigator

VCU Breakthrough fund Weining Wang, Ping Xu (MPI) 7/1/2023-6/30/2025

VCU $200,000

Mechanistic Understanding of Initial Bacterial Attachment in Biofilm Formation

This study aimed to investigate the initial attachment of oral Streptococcus biofilms to different material surfaces.

Role: Co-Principle investigator 10%

VCU Internal Weining Wang(PI) 5/10/2023-5/9/2024

VCU Commercialization Fund $50,000

Antimicrobial Metal Organic Framework (MOF) for Dental Adhesive.

This project is to explore antibacterial materials against dental microbial adhesive.

Role: Co-I

Finished

Virginia Center For Innovative Technology Weining Wang (PI) 07/01/19-06/30/20

CFIT $100,000.00

Development of a Highly Efficient Air Filter for Inactivation of Airborne Germs

This project is to develop antibacterial air filter by nanotechnology.

Role: Co-PD/PI

CCTR Endowment Fund Ping Xu (PI) 10/1/2019-4/30/2021

VCU $50,000

Effect of bacterial interactions on oral biofilm

Role: Principle Investigator (5%)

R01AI114926 Todd Kitten (PI) 6/15/2015-5/31/2020

NIAID $1,900,000

Role of metal transport in streptococcus sanguinis virulence and competitiveness

This project is to study function of a virulence factor in S. sanguinis

Role: Co-Investigator

R01DE023078 Ping Xu (PI) 7/01/2013-6/30/2018

NIDCR $1,900,000

Interaction of Colonizer and Pathogen In Oral Biofilm

This project is to study interactions of S. sanguinis with other pathogens in oral biofilm.

Role: Principle Investigator (25%)

CCTR Fund 2-92120 Ping Xu (PI) 7/15/2016-7/31/2018

Center for Clinical and Translational Research VC $130,000

Drug development against a periodontal pathogen Porphyromonas gingivalis

Role: Principle Investigator

U54HD080784 Buck (PI) 9/6/2013-8/31/2017

NIH $11,236,000

A multi-'omic analysis of the vaginal microbiome during pregnancy.

This project is to study vaginal microbiome with multiple “omic” approach.

Role: Consultant

KZZDEWTZ08 Shen (PI) 1/201212/2016

Chinese Academy of Science Key Projects ￥6,000,000

Lakes Environmental Change and Quantitative Simulation Process

State Key Laboratory of Lake Science and Environment, Nanjing Institute of Geography and Limnology, CAS, Nanjing, China

Role: CoI (1/12)

F31 DE024038 01 Victoria Stone(PI) 9/10/2013-9/9/2015

NIDCR $68,000

A Novel Strategy In Antimicrobial Drug Discovery Against Porphyromonas Gingivalis

This is a fellowship award to Miss Stone for supporting her Ph.D. study.

Role: Sponsor

Clinical Innovation Fund 144090 Ping Xu (PI) 2/1/2014-1/31/2015

VCU Dental school $15,000

Examining potential compounds for anti-Porphyromonas gingivalis drugs.

This project is to identify novel antibacterial drugs against oral pathogen P. gingivalis.

Role: Principle Investigator (5%)

UH3AI083263 Buck (PI) 5/15/2009-8/31/2014

NIH $7,821,000

The vaginal microbiome: disease, genetics and the environment.

This is the first NIH human microbiome project to study vaginal microbiome.

Role: Consultant

R01DE018138-05 Ping Xu (PI) 2/01/2008-1/31/2014

NIDCR $1,702,959

Regulation Of Fitness And Virulence In Oral Streptococci

This project is to study the virulence factor regulator Mgs in Streptococcus sanguinis.

Role: Principle Investigator (25%)

R01DE018138-04S1 Ping Xu (PI) 2/01/2008-1/31/2014

NIDCR $ 50,066

Regulation Of Fitness And Virulence In Oral Streptococci

This is supplement for R01 study the virulence factor regulator in Streptococcus sanguinis.

Role: Principle Investigator (0%)

1R56AI085195 Todd Kitten (PI) 7/15/2011– 6/30/2013

NIH-NIAID $370,789

Endocarditis virulence in Streptococcus sanguinis.

This grant is to characterize the lipoprotein virulence factor, SsaB, in relation to its role in endocarditis virulence.

Role: Co-investigator (5%)

 (Internal) 2-92316 Ping Xu(PI) 5/1/2012-4/30/2013

Dental-Nursing School $25,000

Microbial patterns and associations with host responses in mechanically ventilated adults Role: Principle Investigator (5%)

R01DE018138\_04S1 Ping Xu (PI) 10/01/2011-1/31/2013

NIDCR $50,066

Regulation Of Fitness And Virulence In Oral Streptococci

This is a supplement project to support graduate student.

Role: Principle Investigator (25%)

AD William Fund 648738 John Gunsolley(PI) 4/1/2011-3/31/2012

AD William Fund $15,000

Bacterial Profiles of Healthy vs. Diseased Sites in Chronic Periodontitis

Role: Co-Investigator (5%)

144603 Todd Kitten (PI) 1/1/2011-6/30/2012

VCU Presidential Research Incentive Program (PRIP) $50,000

Examination of the role of Mn-dependent superoxide dismutase in SsaB-mediated oxygen tolerance and endocarditis virulence

This project is to study ssb, a gene encoding a virulence factor in S. sanguinis

Role: Co-Investigator (5%)

144602 Ping Xu (PI) 7/01/2010-12/31/2011

VCU Presidential Research Incentive Program (PRIP) $50,000

Systematic Biofilm Gene Identification In Streptococcus Sanguinis

This project is to study S. sanguinis biofilm by systems biology

Role: Principle Investigator(20%)

6-46541 Ping Xu (PI) 1/01/2007-6/30/2009

AD William Multi-school Fund $ 75,000

Streptococcus sanguinis vaccine discovery

This project is to screen vaccine candidates for against Streptococcus sanguinis endocarditis

Role: Principle Investigator(20%)

J-743 Ping Xu (PI) 7/01/2004-6/30/2008

Jeffress Trust $ 50,000

Comparative Genomics Of Virulence Related Genes In Streptococcus

This project is to study virulence related genes in streptococci using comparative genomics.

Role: Principle Investigator (20%)

NIH U54 AI57168 Gregory Buck (PI of VCU Sub, UMD primary)

 9/01/2003-2/29/2009

RCE-MARCE $1,552,327

Cryptosporidium Genomics, Pathogenesis And Vaccinology

This project is to decode the Cryptosporidium parvum genome and identify potential vaccines for the bioterrorism agent.

Role: Co-Investigator (10%)

R01A150196 Gregory Buck (PI) 5/15/2000-8/31/2006

NIAID $2,557,530

Functional genomics of metacyclogenesis in T. cruzi

The major goals of this project are to use in house microarrays to generate a gene expression profile of T. cruzi during metacyclogenesis.

Role: Co-Investigator(10%)

R01AI50425 Gregory Buck (PI) 7/01/2001-5/31/2006

NIAID $1,624,425

Molecular Interactions of the SL RNA in T. cruzi

The major goals of this project are to identify proteins the bind to and interact with the SL RNA in Trypanosoma cruzi. This project is to screen more candidate proteins interacting with SL RNA. This project based on my research on identification trans-splicing factors using yeast three hybrid system.

Role: Co-Investigator(30%)

R01DE012882 Francis Macrina (PI) 7/01/2000-6/30/2004

NIDCR $875,334

Streptococcus Sanguis Microbial Genome Project

This project is to decode the Streptococcus sanguinis genome and genome analysis.

Role: lead contributor (Gregory Buck Co-PI, Todd Kitten co-Investigator)

R01DC005575 Xuezhong Liu (PI) 9/15/2001-8/31/2006

NIDCD, $1,133,806

Molecular Basis Of Non-Syndromic Deafness

I am involving the project to identify partners of Usher syndrome genes using yeast two-hybrid system.

Role: Co-Investigator(5%)

U01- AI46418 Gregory Buck (PI) 5/15/2000-4/30/2003

NIAID $1,947,545

Cryptosporidium parvum Genome Sequencing Project.

The major goals of this project are: to determine and analyze the nucleotide sequence of the genome of C. parvum genome (10.8 Mb)

Role: Co-Investigator (30%)

AHA-0160370U Ping Xu (PI) 7/01/2001-12/31/2003

American Heart Association $ 132,000

A Spliced Leader RNA Binding Protein From Trypanosoma cruzi.

This project is to characterize the function of XB1, a SL RNA binding protein, in splicing processing.

Role: Principle Investigator (30%)

AD William 6-46525 Ping Xu (PI) 10/01/1999-9/31/2000

AD. William Fund $ 15,000

Characterization interaction between a putative splicing factor XB1p and SL RNA.

This project is to characterize the RNA-protein interaction for XB1 spliced leader RNA binding protein from Trypanosoma cruzi. .

Role: Principle Investigator (25%)

American Lung Association Award Ping Xu (PI) 7/01/1997-6/30/1998

American Lung Association $40,000

Genomic library of Pneumocystis carinii

This project is to characterize the large fragment genomics DNA library for Pneumocystis carinii.

Role: Principle Investigator (50%)

Career Fellowship Ping Xu (PI) 7/01/1997-6/30/2000

Rockefeller Foundation, UC Davis $ 60,000

The signal transduction pathway for pathogen resistance in rice.

The career fellowship provides three months each year for 3 years for collaborating research with the Plant Pathology Department, University of California at Davis. (Unexecuted)

Role: Principle Investigator (25%)

Chinese Natural Science Foundation Ping Xu (PI) 4/1/1997- 3/31/2000

National Natural Science Foundation of China ¥100,000

Identification of novel DNA binding proteins to tobacco osmotin promoter

Role: Principle Investigator (20%)

Chinese Education Commission Ping Xu (PI) 10/1/1996- 9/30/1997

Chinese Education Commission ¥70,000

Distinguished Scholar Fund for plant physiology

Role: Principle Investigator (20%)

Zhejiang Science and Technology Commission Ping Xu (PI) 3/1/1997- 2/28/2000

Zhejiang Science and Technology Commission ¥100,000

The application of osmotin proteins for pathogenic resistant crops.

Role: Principle Investigator (20%)

Zhejiang Education Commission Ping Xu (PI) 8/1/1996- 7/31/1997

Zhejiang Education Commission ¥50,000

Dissertation of Protein-DNA interaction of Tobacco Promoter PBP1.

Role: Principle Investigator (20%)

Zhejiang Agriculture University Ping Xu (PI) 7/01/1996- 6/30/1997

Zhejiang Agriculture University ¥30, 000

Distinguished Scholar Research Fund

Role: Principle Investigator (20%)

Visiting Professorship Ping Xu (PI) 6/1/1994- 8/31/1996

Rockefeller Foundation, Purdue University $100,000

The plant pathogenesis responsible genes for environment stress.

Role: Principle Investigator (100%)

“863” High Science and Technology Debao Li(PI) 10/1/1991-9/30/1996

863 High Science and Technology Program ¥500, 000

Characterization of antagonistic proteins to rice pathogen Xanthomonas oryzae pv. oryzae.

Role: Co-I (20%)

Chinese Science and Technology Commission Debao Li(PI) 10/1/1990-9/30/1995

Chinese Science and Technology Commission ¥300, 000

Genetic Engineering of Plant Pathogenic Resistant Proteins.

Role: Co-I (20%)

Zhejiang Science and Technology Commission Debao Li(PI) 5/1/1993-4/30/1996

Zhejiang Science and Technology Commission ¥1,000, 000

The isolation and characterization of useful genes for transgenic pathogen resistant plants.

Role: Co-I (20%)

Zhejiang Science and Technology Commission Debao Li(PI) 10/1/1993-9/30/1996

Zhejiang Science and Technology Commission ¥500, 000

The function and mechanism of antagonistic proteins to rice pathogen Xanthomonas oryzae pv. oryzae.

Role: Co-I (20%)

Zhejiang Science and Technology Commission Ping Xu (PI) 7/1/1993-6/30/1996

Zhejiang Science and Technology Commission ¥200, 000

The isolation and characterization of viral genes for transgenic pathogen resistant plant.

Role: PI (20%)

Zhejiang Science and Technology Commission Debao Li(PI) 4/1/1990-3/31/1993

Zhejiang Science and Technology Commission ¥100, 000

The exploration and establish transgenic plant system.

Role: Co-I (20%)

Zhejiang Education Commission Debao Li(PI) 4/1/1991-3/31/1993

Zhejiang Education Commission ¥50, 000

The study of important plant virus in Zhejiang Province.

Role: Co-I (20%)

Zhejiang Science and Technology Commission Ping Xu (PI) 10/1/1990-9/30/1993

Zhejiang Science and Technology Commission ¥100, 000

The analysis of antagonistic bacterial proteins to Xanthomonas oryzae pv. oryzae.

Role: PI (20%)

Sino-British Joint Education Ping Xu (PI) 7/1/1987-6/31/1989

Oxford University, Sino-British Joint-Education Program $50, 000.

Fellowship on Molecular biology of cyanobacteria.

Role: PI (100%)

Patents, Inventions, Copyrights.

1. W.-N. Wang, D. Wang, P. Xu, and B. Zhu, Iron Oxide Nanowires Based Filter for the Inactivation of Pathogens, US Patent filed on October 14, 2020 (No. 17/047,536).

2. W.-N. Wang, Z. Zhu, and P. Xu, Self-Decontaminating Nanofibrous Filters, VCU Invention Disclosure, WAN-20-155, PCT/US21/56434 patent filed on October 25, 2021.

3. Cryptosporidium hominis genes and gene products for chemotherapeutic, immune prophylactic and diagnostic applications. US 8,114,976 B2. Feb 14, 2012. Inventors: Gregory Buck, Ping Xu, Luis Shozo Ozaki, Yingping Wang, Joao Marcelo Pereira Alves, Patrico A. Manque, Daniela Puiu, Myma Garcia Serrano

4. Vaccine target and delivery systems for Cryptosporidium. Profiled 2008, Inventors: Gregory Buck, Patrico A. Manque, Fernando Tenjo, Myma Garcia Serrano, Joao Marcelo Pereira Alves, Ping Xu

**EXTRAMURAL PRESENTATIONS**

Invited Speaker

2021

1. Ping Xu. How essential genes may prevent the next pandemic. Mark Wilson Virtual Conference, February 10-11, 2021

2019

2. Ping Xu. Systematic analysis of Streptococcus sanguinis biofilm genes. 18th Annual Mark Wilson Conference, 29thAnnual Meeting of the OIMRG, Cay Resort, Duck Key, Florida , February 8 – February 11, 2019.

2018

3. Ping Xu Biofilm genes and regulation in Streptococcus. 17th Annual Mark Wilson Conference, 28thAnnual Meeting of the OIMRG Presidente InterContinental, Cancun, Mexico February 9 – February 12, 2018.

4.

2017

5. Ping Xu, Identify Pathogen Essential Genes By Genomics and Systems Biology, April 17, 2017 Nanjing Agriculture University, China

6. Ping Xu, Essential Genes By Systems Biology, March 30, Zhejiang University

7. Ping Xu The Oral Microbiota in Health and Diseases, March 31, CCID, 2017, Zhejiang University

2016

8. Ping Xu, Understand Oral Streptococcal Gene Function by Systems Biology, May 9, 2016 OCMB, VCU

9. Ping Xu Microbiome and Health. Salveo Diagnostics, Feb 29, 2016

10. Ping Xu Potential inhibitor screening approach: from P. gingivalis essential gene to antimicrobial molecules. 5th Annual Mark Wilson Conference 26thAnnual Meeting of the OIMRG, Renaissance St. Croix Carambola Beach, St. Croix, USVI, February 12 – February 15, 2016

2015

11. Ping Xu. Identification of antibacterial drug targets by genomics and systems biology, Hangzhou, Speaker September 11-13, 2015

12. Ping Xu. The principles and applications of the next generation sequencing technologies. Hangzhou, Speaker September 11-13, 2015

13. Ping Xu. . Gene Functional Study by Systems Biology, World DNA day and Genome, April 25-28, 2015, Nanjing Youth Olympic Center (NYOC), Nanjing, China. Co-Chair, Speaker

14. Ping Xu. Control Infectious Bacterial Pathogens By Genomics and Systems Biology, April 24, 2015, Jiaotong University, Shanghai, China.

15. Ping Xu, Oral Microbiome and Human Health, April 3, Vriginia Commonwealth University

2014

16. Ping Xu\*. Systems Biology on biofilm formation, Dec 10, 2014, University of California Los Angle.

17. Ping Xu\*. Essential gene identification in Streptococcus sanguinis by Systems Biology. July9, 2014, Zhejiang University, Hangzhou, China.

18. Ping Xu\*. Microbiome and Human Health Application, July 2, 2014, CAS, Nanjing, China.

19. Ping Xu\*. Systems Microbiology, July 7, 2014, CAS, Nanjing, China.

20. Ping Xu\*. Identification of antibacterial targets from genomes by systems microbiology. Microbiology in Omics Era, June 27 – 30, 2014, Chongqing, China.

21. Ping Xu\*. Systems Microbiology for oral pathogens. 25 Mark Wilson Conference, Feb. 7-10, Puerto Rico, 2014

2013

22. Ping Xu, Essential genes in oral microbes. 24 Mark Wilson Conference, Feb. 9-11, Puerto Rico, USA, 2013

23. Ping Xu, Identification of drug targets in bacterial pathogens by systems biology. The 3th Annual World Congress of Molecular & Cell Biology, June 14-16, Suzhou, China, 2013, Co-Chair, Speaker

24. Ping Xu\*. Next Generation Sequencing and Applications, June 19, 2013, CAS, Nanjing, China.

25. Ping Xu\*. Streptococcal Essential genes, June 21, 2013, Nanjing University, China.

26. Ping Xu, Essential genes in oral microbes. 24 Mark Wilson Conference, Feb. 9-11, Puerto Rico, USA, 2013

2012

27. Ping Xu, Combating Emerging Bacterial Pathogens by Genomics and Systems Microbiology. The 13th Asia-Pacific Congress of Clinical Microbiology and Infection (APCCMI), 2012. Beijing, China Oct 25-28, 2012

28. Ping Xu, Study Oral Streptococcus by Systems Biology. Boston University, Massachusetts, Sept 24, 2012

29. Ping Xu, Functional analysis of S. sanguinis genes by systems biology. 23 Mark Wilson Conference, Feb. 10-14, Aruba, Netherlands, 2012

2011

30. Ping Xu, Systems biology analysis of streptococcal gene functions, J Craig Venter Institute (JCVI), Rockville MD. June 28, 2011

31. Ping Xu, Microbiome and comparative genomics. Zhejiang University, Hangzhou, P.R.China, April 19, 2011

32. Ping Xu, Systems biology analysis of essential genes. Nanjing University, Nanjing, P.R. China, April 14, 2011

33. Ping Xu, Systems Biology Analysis of Biofilm Genes in S. sanguinis. International Symposium of Microbial Biofilm 2011. Sichuan, China April 6-8, 2011

2009

34. Ping Xu, Streptococcal virulence genes by Systems Biology, Dec 16, 2009, University of Toledo , Ohio

35. Ping Xu, Biofilm Gene Association in Oral Streptococci by Systems Biology, Summit on Systems Biology 2009, The Microbial World and Beyond, June 16-19, 2009, The Omni Richmond Hotel, Richmond, Virginia

36. Ping Xu, Integrative Study Streptococcal Virulence by Comparative Genomics and Systems Biology, UT-ORNL-KBRIN Bioinformatics Summit 2009, March 20-22, 2009, Fall Creek Falls State Park, Pikeville, TN

2008

37. Ping Xu, Medical Microbiology and Immunology Department, University of Toledo, Title: Study streptococcus sanguinis pathogenesis by comparative genomics and systems biology. December 11-13, 2008,

38. Ping Xu, The microbial network analysis on Streptococci. June 4 2008, Zhejiang University, Hangzhou, P.R.China

2006

39. Ping Xu, New Technology of Genome Sequencing. October 2 2006, Zhejiang University, Hangzhou, P.R.China

2004

40. Ping Xu, The Application of Microbial Genomics, October 26 2004, College of Biotechnology and Agriculture, Zhejiang University, Hangzhou, China

41. Ping Xu, Microbial Genomics on Cryptosporidium hominis, October 25 2004, College of Life Science, Zhejiang University, Hangzhou, China

2003

42. Ping Xu, The analysis of Cryptosporidium genome, May 10, 2003, University of Virginia

43. Ping Xu, Identification Splicing Factors in Trypanosoma cruzi, a Chaga’s Disease Agent, January 02 2002 Virginia Heart Institute, Richmond, USA

2001

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9. Victoria Stone, Ahmad Obaidullah, Xiuchan Ge, Ping Xu. Virtual Screening to Identify Novel Antimicrobial Agents against Porphyromonas gingivalis. AADR, March 19-22, Charlotte NC, 2014

10. Ping Xu\*. Identification of drug targets in bacterial pathogens by systems biology. The 3th Annual World Congress of Molecular & Cell Biology, June 14-16, Suzhou, China, 2013 Speaker

11. Victoria Stone, Xiuchun Ge, Ping Xu\*. A novel strategy in antimicrobial drug discovery against periodontal pathogen Porphyromonas gingivalis. ASM 113th Meeting, May 18-21, Denver, Colorado, USA, 2013.

12. Ping Xu\*. Essential genes in oral microbes. 24 Mark Wilson Conference, Feb. 9-11, Puerto Rico, 2013 Speaker

13. Ping Xu\*. Combating Emerging Bacterial Pathogens by Genomics and Systems Microbiology. 13th Asia-Pacific Congress of Clinical Microbiology and Infection. Oct 25-28, 2012 Beijing, China. Speaker

14. Victoria Stone, Ping Xu. Identification of a Novel Target in Porphyromonas gingivalis. Oct 2012, Richmond VA, Watts Day

15. John Gunsolley, Xiuchun Ge, Rafael Rodriguez, My Trinh, Jordan Niermeyer, Ping Xu\*, Bacterial Profiles of Healthy versus Diseased Sites in Chronic Periodontitis, 2012 IADE conference Speaker

16. Xu P\*, Ge X. Understanding of Streptococcal Essential Gene Functions by Systems Biology. ASM 4th Conference on Prokaryotic Cell Biology and Development, 2012 Montreal Canada

17. Tyler Brobst, Tara Nulton, Ping Xu\*. Identification of protein–gene interactions in the oral bacteria Streptococcus sanguinis through chromatin immunoprecipitation sequencing (ChIP-Seq), The Microbiology, Infectious Disease, and Public Health (MIDPH) poster session, Aug 1. 2012

18. Ping Xu\*. Functional analysis of S. sanguinis genes by systems biology. 23 Mark Wilson Conference, Feb. 10-14, Aruba, Netherlands, 2012 Speaker

19. John Gunsolley, Xiuchun Ge, Rafael Rodriguez, My Trinh, Jordan Niermeyer, Ping Xu\*, Oral Bacterial Profiles of Health versus Disease in Chronic Periodontitis, 2011 IADE conference

20. Douglas Stevenson, Ping Xu\*. The Evolution of Vitamin B12 in Streptococcus sanguinis. HHMI Summer Scholars Program Final Presentation, August 5, 2011, Harris Hall Room 4169

21. Jacob Carey; Ping Xu\*, Identification of gene interactions through expression profiles in S. sanguinis. The Microbiology, Infectious Disease, and Public Health (MIDPH) poster session, July 29, the 12th Floor of the One Capitol Square Building (830 E Main St). 2011

22. Ping Xu\*, Xiuchun Ge, Systems Biology Analysis of Biofilm Genes in S. sanguinis. International Symposium of Microbial Biofilm 2011. Sichuan, China April 6-8, 2011, Speaker

23. Xiuchun Ge, Lei Chen, Xiaojing Wang, Jenishkumar R Patel, Ping Xu\* Identification of genes for biofilm formation in Streptococcus sanguinis. American Society of Microbiology, 111th General Meeting, New Orleans, Louisiana, USA, May 21-24, 2011

24. Lei Chen, Xiuchun Ge, Xiaojing Wang, Jenishkumar R Patel and Ping Xu\* ComFC involved in hydrogen peroxide production acidic tolerance and chain length formation in Streptococcus sanguinis. American Society of Microbiology, 111th General Meeting, New Orleans, Louisiana, USA, May 21-24, 2011

25. Ge X., Chen L., Wang X., Kitten T., Munro C., Xu P\*. Involvement of the nox Gene in Virulence, Biofilm Formation and Competence in Streptococcus sanguinis. American Society of Microbiology, 110th General Meeting, San Diego Convention Center, USA, May 22-27, 2010.

26. Lei Chen, Xiuchun Ge, Yuetan Dou, Xiaojing Wang, Jenishkumar R Patel and Ping Xu\*, Identification of hydrogen peroxide producing genes in Streptococcus sanguinis. American Society of Microbiology, 110th General Meeting, San Diego Convention Center, USA, May 22-27, 2010.

27. Jill Callahan, Alejandro Rodriguez, Sheeri Kokhar, Xiuchun Ge, Ping Xu, and Todd Kitten, The competence regulon of Streptococcus sanguinis enhances biofilm formation. November 13 - 14 , 2009. ASM The Virginia Branch. Speaker

28. Xu P\*., Ge X., Dou Y., Chen L., Wang X., Patel JR., Bonchev D. Biofilm Gene Association in Oral Streptococci by Systems Biology, Summit on Systems Biology 2009, The Microbial World and Beyond, June 16-19, 2009, The Omni Richmond Hotel, Richmond, Virginia, Speaker

29. Ping Xu\* Integrative Study Streptococcal Virulence by Comparative Genomics and Systems Biology, UT-ORNL-KBRIN Bioinformatics Summit 2009, March 20-22, 2009, Fall Creek Falls State Park, Pikeville, TN, Speaker

30. Xu P\*, Ge X. Investigation of vitamin B12 biosynthesis genes in oral beneficial microbe Streptococcus sanguinis, 2nd ASM Conference on Beneficial Microbes: Beneficial Host-Microbial Interactions, Oct 12-16 2008, San Diego. CA

31. X. Ge, P. Xu\*. Involvement of thrB in Antuinducer-2 Production in Streptococcus sanguinis. American Society of Microbiology, 108th General Meeting, Boston Convention Center, USA, June 1-5, 2008.

32. X. Ge, T. Kitten, Z. Chen, S. Lee, C. Munro, P. Xu\*. Identification of Streptococcus sanguinis Genes Required for Biofilm formation and Examination of Their Role in Endocarditis Virulence. American Society of Microbiology, 108th General Meeting, Boston Convention Center, USA, June 1-5, 2008.

33. Joseph Moeller, Katherine Vollmer, Xiuchun Ge, Jeff Elhai, Todd Kitten, Ping Xu\*. Candidate Antigens from Streptococcus mutans for the Development of a Vaccine Against Infective Endocarditis. Fifth Annual RECOMB Satellite Workshop on Comparative Genomics, University of California, San Diego, 2007, Speaker

34. Ping Xu, Joao M. Alves, Todd, Kitten, Arunsri Power, Zhenming Chen, Patricio Manque, Xiuchun Ge, Myrna G. Serrano, Luiz S. Ozaki, Doruk Akan, Stephanie Hendricks, Yingping Wang, Daniela Puiu, Michael Chiplin, Sehmi Paik, Darrell L. Peterson, Francis Macrina and Gregory A. Buck. The Genome of Streptococcus sanguinis. ASM 106th Meeting, Orlando, FL May 21-25, 2006.

35. X. Ge, T. Kitten, C. L. Munro, C.L. Hahn, D. H. Conrad and P. Xu. Identification Of Vaccine Candidates In Streptococcus sanguinis By An Antigen Pooling Strategy. ASM 106th Meeting, Orlando, FL May 21-25, 2006.

36. Ping Xu, Giovanni Widmer, Yingping Wang, L. Shozo Ozaki, Joao Alves, Daniela Puiu, Myrna Serrano, Stephanie Sybert, Zhenming Chen, Galina Kazanina, Patricio A. Manque, Andy Holzgrefe, Donna Akiyoshi, Aaron Machey, William Pearson, Saul Tzipori, Gregory Buck. Genome Sequence of Cryptosporidium parvum genotype 1 and the comparison with genotype 2. The Second Mid-Atlantic Microbial pathogenesis Meeting. 2004 Feb 8-10, Wintergreen Resort, Wintergreen, Virginia (Abstract)

37. Ping Xu, Zhenming Chen, Fernando A. Tenjo, Phavitri Ramcharan, William A. Holzgrefe, Joao Alves, Myrna Serrano, Patricio Manque, Galina Kazanina, Tadeusz Zwierzynski, Luiz Ozaki, Ruth Carvalho, Gregory Buck. Characterization of two putative splicing factors, XB1 and XB2, in Trypanosoma cruzi. Molecular Parasitology Meeting XV, September 19-23, 2004, Marine Biological Laboratory, Woods Hole, MA, USA. (Abstract)

38. Joao M.P. Alves, Myrna G. Serrano, Ping Xu, Giovanni Widmer, Yingping Wang, Luiz S. Ozaki, Daniela Puiu, Patricio Manque, Donna Akiyoshi, Aaron J. Mackey, William R. Pearson, Paul H. Dear, Alan T. Bankier, Darrell L. Peterson, Saul Tzipori, Gregory A. Buck. The genome of Cryptosporidium hominis. Molecular Parasitology Meeting XV, September 19-23, 2004, Marine Biological Laboratory, Woods Hole, MA, USA. (Abstract)

39. Ping Xu, Giovanni Widmer, Ying Ping Wang, Franklin Lin, Shozo L Ozaki, Joao Alves, Daniela Puiu, Wayne Vogel, Galina Kazanina, Jacinda Power, Stephanie Sybert, Zhenming Chen, Limin Wen, Patricio A Manque, Myrna Serrano, William Pearson, Saul Tzipori, Gregory A Buck. The Genome Sequence of Cryptosporidium parvum Genotype I. Molecular Parasitology Meeting XIV, September 14-18, 2003, Marine Biological Laboratory, Woods Hole, MA, USA. (Speaker)

40. Patricio A. Manque, Li Min Wen, Joao Alves, Helene S Brabosa, M.Ruth Carvalho, Brad Freeman, Samuel Goldenberg, Marco Aurelio Krieger, Darrell Mallonee, Maria de Nazareth Meirelles, L. Shozo Ozaki, Daniela Pavoni, Mirian Claudia de S. Pereira, Celina Poersch, Christian M. Probst, Daniela Puiu, Myrna G Serrano, Ping Xu, Tadeusz Zwierzynski, Gregory A. Buck. Global Modulation Of Cellular Function In Cardiomyocytes Infected By Trypanosoma cruzi As Revealed By Microarray Analysis. Molecular Parasitology Meeting XIV, September 14-18, 2003, Marine Biological Laboratory, Woods Hole, MA, USA. (Speaker)

41. Joao M.P. Alves, Andrea Ávila, Luciana Bitencur, Josiane Cardoso, M. Ruth Carvalho, Bruno Dallagiovanna, Alejandro C. Dominguez, Nobuichi Ebachi, Stenio P. Fragoso, Viviane Giese, Samuel Goldenberg, Marco A. Krieger, Darrell Mallonee, Patricio A. Manque, Viviane S. Monteiro, Sheila Nardelli, L. Shozo Ozaki, Daniela Puiu, Luiz R. Nunes, Regina C. Oliveira, Daniela P. Pavoni, Gisele Picchi, Christian M. Probst, Myrna G. Serrano, Vanessa Sotomaior, Fernanda Stange, Li-min Wen, Ping Xu, Tadeusz A. Zwierzynski, Gregory A. Buck. Microarray Analysis of cAMP Effects on Trypanosoma cruzi Metacyclogenesis. Molecular Parasitology Meeting XIV, September 14-18, 2003, Marine Biological Laboratory, Woods Hole, MA, USA. (Abstract)

42. Daniela P Pavoni, Andrea Ávila, Alejandro C Dominguez, Bruno Dallagiovanna, Christian M Probst, Gisele Picchi, Luciana B Santos, Fernanda Stange, Josiane Cardoso, Sheila Nardelli, Stenio P Fragoso, Vanessa Sotomaior, Viviane Giese, Viviane M Goes, Luiz Nunes, Regina C Oliveira, João Alves, Nobuichi Ibachi, Li-min Wen, Patricio A Manque, Luiz S Ozaki, Myrna G Serrano, Daniela Puiu, Darrell Mallonee, Ping Xu, Tadeusz A Zwierzynski, Maria Ruth Carvalho, Gregory A Buck, Samuel Goldenberg, Marco A. Krieger. Evaluation using microarray technology of polysomal mobilization in gene expression regulation during the Trypanosoma cruzi metacyclogenesis. Molecular Parasitology Meeting XIV, September 14-18, 2003, Marine Biological Laboratory, Woods Hole, MA, USA. (Abstract)

43. Christian M. Probst, Andrea Ávila, Celina O. Poersch, Daniela P. Pavoni, Samuel Goldenberg, Viviane M. Goes, Helene S. Barbosa, Maria de Nazareth Meirelles, Mirian Claudia de S. Pereira, Daniela Puiu, Darrell Mallonee, Gregory A. Buck, João Alves, Luis S. Ozaki, Li-min Wen, Maria Ruth Carvalho, Myrna G. Serrano, Patricio A. Manque, Ping Xu, Tadeusz A. Zwierzynski, Brad Freeman, Marco A. Krieger. Expression analysis of cardiomyocite response to interaction with in vitro differentiated metacyclic Trypanosoma cruzi trypomastigotes. Molecular Parasitology Meeting XIV, September 14-18, 2003, Marine Biological Laboratory, Woods Hole, MA, USA. (Speaker)

44. Christian M. Probst, Andrea Ávila, Alejandro C Dominguez, Bruno Dallagiovanna, Daniela P Pavoni, Gisele Picchi, Luciana Bitencourt, Fernanda Stange, Josiane Cardoso, Sheila Nardelli, Stenio. P Fragoso, Vanessa Sotomaior, Viviane Giese, Viviane S Monteiro, Luiz Nunes, Regina C Oliveira, Joao Alves, Nobuichi Ibachi, Li-min Wen, Patricio A Manque, Luiz S Ozaki, Myrna G Serrano, Daniela Puiu, Darrell Mallonee, Ping Xu, Tadeusz A Zwierzynski, Maria . R Carvalho, Gregory A. Buck, Samuel Goldenberg, Marco A. Krieger. Analysis of gene expression during T. cruzi metacyclogenesis using microarrays. Molecular Parasitology Meeting XIV, September 14-18, 2003, Marine Biological Laboratory, Woods Hole, MA, USA.

45. Ping Xu and Gregory Buck. Digestion Chain Reaction (DCR)—A novel subtrative technology for genome studies. Posted on 68th Cold Spring Harbor Laboratory Symposium- The genome of Homo sapiens. May 27-June2, 2003 Cold Spring Harbor Laboratory, New York. (Abstract)

46. Ping Xu, Li-min Wen, Galina Kazanina, Zhen-Ming Chen, M. Ruth Carvalho, Gregory A. Buck. Characterizing gene functions in Trypanosoma cruzi using yeast one-, two-, and three-hybrid systems, Posted on Molecular Parasitology Meeting XIII, September 22-26, 2002, Marine Biological Laboratory, Woods Hole, MA (Abstract)

47. Krieger, M., Freund, A., Ávila, A., Muniz, B., Probst, C., Pavoni, D., Sunaga, D., Marchini, F., Picchi, G., Lenzi, K., Ribas, P., Fragoso, S., Sotomaior, V., Giese, V., Góes, V., Nunes, L., Oliveira, R., Muto, N., Ozaki, L., Carvalho, M., Xu, P., Wen, L., Buck, G., Goldenberg, S. Analysis of the Gene Expression Program During the Cellular Differentiation of Trypanosoma cruzi (metacyclogenisis) Through Microarray Hybridization. Presented on Molecular Parasitology Meeting XIII, September 22-26, 2002, Marine Biological Laboratory, Woods Hole, MA (Speaker)

48. Joao Alves, Li-min Wen, Darrell Mallonee, L. Shozo Ozaki, Ping Xu, M. Ruth Carvalho, Tadeusz A. Zwierzynski, Christian Probest, Marco Aurelio Krieger, Stenio Fragoso, Samuel Goldenberg, Dayse Teixeira Silva, Helene Santos Barbosa, Maria de Nazareth L. Meirelles, Mirian Claudia de S. Pereira, Gregory Buck. Presented on Molecular Parasitology Meeting XIII, September 22-26, 2002, Marine Biological Laboratory, Woods Hole, MA.(Speaker)

49. Ping Xu, Ying Ping Wang, L. Shozo Ozaki, Wayne Vogel, Galina Kazanina, Brian Sutton, Jacinda Powers and Gregory A. Buck. The analysis Cryptosporidium parvum Genome. Posted on Cancer Genomics Symposium, Massy Cancer Center, Biotechnology Park I, Richmond, Virginia June 11-14, 2002 (Speaker)

50. Ping Xu, Li-min Wen, Galina Kazanina, Zhenming Chen, M. Ruth Carvalho, and Gregory A. Buck. Identification and characterization of novel splicing factors and transcriptional factor in Trypanosoma cruzi. Posted on: The VBC(Virginia Bioinformatics Consortium) Bioinformatics and Pharmacogenomics Symposium. June 12-14, 2002, Omni Hotel, Richmond, VA (Abstract)

51. Ping Xu, Ying Ping Wang, L. Shozo Ozaki, Wayne Vogel, Galina Kazanina, Brian Sutton, Jacinda Powers and Gregory A. Buck. The Cryptosporidium parvum Genome Architecture. Presented on: The VBC(Virginia Bioinformatics Consortium) Bioinformatics and Pharmacogenomics Symposium. June 12-14, 2002, Omni Hotel, Richmond, VA (Abstract)

52. Ping Xu, Giovanni Widmer, Yingping Wang, Franklin Lin, L. Shozo Osaki, Saul Tzipori, Gregory A. Buck. Genome sequencing of Cryptosporidium parvum type I isolate. Posted on Tri-Conference on Human Genome Project, Gene Functional,Analysis and Genomic Partnering. Santa Clara Convention Center, Santa Clara, California, Feb 23-Mar 1 2002(Abstract)

53. Ping Xu, L. Wen, G. Benegal, and G. Buck. "Identification of Gene Encoding a Putative Splicing Factor from Trypanosoma cruzi." Presented at the 9th Molecular Parasitology Meeting at Marine Biology Laboratory, Woods Hole, Massachusetts, September 13-17, 1998 (Speaker)

54. Limin Wen, Ping Xu, Guari Benegal, and Gregory Buck. "Isolation of a cDNA Encoding a Putative SL RNA Gene Promoter Binding Protein from a Normalized Trypanosoma cruzi cDNA Library." Presented at the 9th Molecular Parasitology Meeting at Marine Biology Laboratory, Woods Hole, Massachusetts, September 13-17, 1998 (Speaker)

55. Organizing Committee member and general secretary for the Third International Plant Pathology and Biotechnology Symposium, Hangzhou, P. R. China). 1997

56. Matsumato TK, Yun DJ, Xu P, Diurzo MP, Abad RA,Bressan RA and Hasegawa PM. Combinatorial Expression of Three Pathogenesis Related Proteins (Osmotin, PR-1 and Chitinase) for Disease Evaluation of Transgenic Tobacco. SIVB 1996 World Congress on In Vitro Biology “Biotechnology: From Fundamental Concepts to Reality”. June 22-27, 1996. San Francisco, CA

57. Xueping Zhou, Ping Xu, Debao Li. “Moelcular Biology of Broad Bean Wilt Virus I purification, Biophysical and Biochmical Characterization”. Beijing, Symposium on Chinese Agriculture and Biotechnology, April 11-15, 1994.

58. Organizing Committee and Editorial Committee general secretary for the Second International Plant Pathology and Biotechnology Symposium, Hangzhou, P. R. China 1994

59. Ping Xu, Debao Li, Weiguang Zhu, Wailing Chen, Xiaofong Chen, and Qixing Ge. "Analysis of Several Antagonistic Bacterial Proteins to Xanthomonas oryzae PV. Oryzae". Presented at Molecular Crop Agriculture for the Pacific Rim. Sacramento, California, U.S.A., June 20-24, 1992

60. Ping Xu , Zhaoqi Zeng "Study of Shuttle Vectors of Escherichia coli and Cyanobacterium Anabaena". Hangzhou, Nov 10-15, 1991.

**DISSERTATION OR THESIS AGENCY PUBLICATION**

2017 Fadi El-Rami, PhD Microbiology, A Systems Biology Approach For Predicting Essential Genes and Deciphering Their Dynamics Under Stress In Streptococcus Sanguinis, June 8, 2017

2015 Victoria Stone, PhD Microbiology, A Novel Antimicrobial Drug Discovery Approach in the Periodontal Pathogen Porphyromonas gingivalis, August 31, 2015

2013 Sawsan Atia, Systematic Analysis Of ABC Transporters In Streptococcus sanguinis

2011 My N Trinh, Role Of Two-Component System Response Regulators In Virulence Of Streptococcus pneumoniae TIGR4 In Infective Endocarditis Advisor

2011 Karra Lynne Evans, Systematic Study Of Gene Functions For Morphological Chain Formation In Streptococcus sanguinis Advisor

2010 Jenishkumar R. Patel Environmental Responses Of Two-Component Systems In Streptococcus sanguinis, Advisor

**TEACHING, ADVISING AND MENTORING.**

Course director

2009- present BNFO653, Advanced Molecular Genetics-- Bioinformatics and Computational Genomics, Spring. 2005 Cross-course with BNFO653. (Director Ping Xu)

2002- present MICR653, Advanced Molecular Genetics-- Bioinformatics and Computational Genomics, Spring. 2005 Cross-course with BNFO653. (Director Ping Xu)

1996-1997 Course for Ph.D. students, Advanced Molecular Biology(Director Ping Xu).

1996-1997 Course for graduate students, The Principal and Methods in Molecular Biology (Director Ping Xu).

1993-1994 Course for graduate students, The molecular biology(Director Ping Xu)

1993-1997 Coordinator and the chief lecturer of a series of Chinese National Workshops entitled "The Genetic Engineering and the Principles of Recombinant DNA" (three to four workshops every year).

1992-1994 Course for Ph.D. students, The Principal and Methods in Molecular Biology (Director Ping Xu).

Course Lecturers

2009-Present MICR607 Techniques in Molecular Biology and Genetics. Fall (Director Shirley Taylor).

2009- 2012 BIOL-S10, The Scientific Research Process Summer (Director Carolyn Conway)

2005-2011 LFSC520, Bioinformatics Technologies. Spring (Director Tarrant Witten).

2005-2010 BNFO650, Sequence Analysis in Biological Systems. Fall (Director Zhongming Zhao)

2002-2009 Bioinformatics and Bioengineering Summer Institute. (Director Jeff Elhai)

2000-2009 MICR507 Techniques in Molecular Biology and Genetics. Fall (Director Shirley Taylor).

1992-1994 Course for graduate students, The principals of plant virology (Director Debao Li)

National workshop

1993-1997 The organizer and the chief lecturer of a series of Chinese National Workshops entitled "The Genetic Engineering and the Principles of Recombinant DNA" (4 workshops/year, 30-40 students who are faculties)/workshop)

Development of innovative teaching materials

1992-1997 Created molecular biology course, developed all teaching materials and experiments, writing materials formed a book "Principles and Methods of Recombinant DNA" that awarded in 1994, the First Class Editor Award from the Chinese Science and Technology Press. This course obtained the First Class Award of Teaching Achievement in Zhejiang Agriculture University, the First Class Award of Teaching Achievement in the Education Commission of Zhejiang Province and finally the Second Class National Ministry of Education Teaching Achievement Award (October, 1997).

**MENTORING**

Visiting Scholars

1. Yan Liu (2017) Chinese Government fund, Associate Professor Anhui Polytechnic University,

2. Xiaoli Shi(2013) Chinese Government fund, Current:Associate professor, NIGLAS, CAS

3. Limei Shi (2013) Chinese Government fund, Current:Assistant professor, NIGLAS, CAS

4. Min Zhang(2012)Chinese Government fund, Current:Associate professor, NIGLAS, CAS

5. Yang Yu (2012), Chinese Government fund, Current: Assistant professor, NIGLAS, CAS

Postdoctoral trainees

1. Zan Zhu (2022-2023). PhD. 2022, Virginia Commonwealth University, USA. . NIH fund “Oral Streptococcal Fitness And Virulence genes”

2. Vysakh Anandan (2022-present). PhD 2021, Mahatma Gandhi University, Priyadharshini Hills, Kottayam, Kerala, India. NIH fund “Oral Streptococcal Fitness And Virulence genes”.

3. Liang Bao (2019- present), PhD 2014 Hokkaido University, NIH “Epigenetic Regulation Of Periodontal Inflammation” and CCTR fund “Interaction of colonizer and pathogen in oral biofilm”. . NIH fund “Oral Streptococcal Fitness And Virulence genes”

4. Xiangzhen Kong (2016.11-2018.2), PhD 2016, Peking University, NIH fund “Interaction of colonizer and pathogen in oral biofilm”.

5. Bin Zhu (2016.8-2019) PhD 2016, Chinese Microbiology Institute, Chinese Academy of Sciences; NIH fund “Interaction of colonizer and pathogen in oral biofilm”.

6. Victoria Stone (2015-2017), PhD 2015 VCU, NIH fund “Interaction of colonizer and pathogen in oral biofilm”.

7. Weihua Chen (2014-) PhD 2011, SIBS, Chinese Academy of Sciences; NIH fund “Interaction of colonizer and pathogen in oral biofilm”.

8. Jinlin Liu (2014-) PhD 2009, Huazhong Agricultural University; NIH fund “Interaction of colonizer and pathogen in oral biofilm”

9. Alleson Dobson (2011-12) PhD 2011 University College Cork; NIH fund “Regulation of fitness and virulence in oral streptococci”; Current: Postdoctoral. University College Cork, Cork, Ireland

10. Lei Chen (2008-2011), PhD, SIBS, Chinese Academy of Sciences, NIH fund, Current: Associate Professor, Tianjing University

11. Yuetan Dou (2008-2009), PhD 2008 Chine Agriculture University, “Regulation of fitness and virulence in oral streptococci”, NIH fund, Current: Postdoctoral, Lama Linda University

12. Xiuchun Ge (2005-2010), PhD 2003 Zhejiang University, “Regulation of fitness and virulence in oral streptococci”, NIH/Internal fund, Current: Assistant Professor, VCU

13. Fernando Tenjo (2005-2006), PhD 1997 University of Los Andes, Colombia, “Cryptosporidium vaccine discovery” NIH fund, Current: Assistant Professor, Department of Biology, VCU.

14. Zhenming Chen (2002-2005), PhD 2000 Zhejiang University, “SLRNA-protein interaction”. AHA/NIH fund, Current: Associate Professor, Zhejiang Normal University

15. Wang Yuchao (1997-1999), PhD 1996 Nanjing Agriculture University, “Fungal osmotic protein” Internal fund/NSF fund, Current: Professor and Associate Dean, College of Plant Protection, Director, National Soy Bean Research Laboratory, Nanjing Agriculture University

16. Zhou Xueping (1992-1994 Collaborate with Professor Li Debao), PhD 1992 Nanjing Agriculture University, Internal Fund, Current: Professor and Dean, College of Agriculture and Biotechnology Zhejiang University.

17. Zhang Yaozhou (1992-1994 Collaborate with Professor Li Debao) PhD 1992 Graduate School of Chinese Academy of Agriculture Sciences, Internal Fund, Current: Professor and Director, Biochemistry Institute, Zhejiang Science and Technology University

Graduate students trained (degree and year)

Year: Major: Degree: Title: Committee:

1. Fadi Elrami (PhD 2012-2017) Major: Microbiology and Immunology, PhD, NIH/Microbiology Dept, VCU, Committee: Ping Xu(Chair), Todd Kitten, Peter Uetz, Danail Bonchev, Maria Rivera, Stephon Fong

2. Jessica Aynapudi (2015-2016, VCU Microbiology). Major: Degree: Master; Title: Involvement of signal peptidase I in Streptococcus sanguinis biofilm formation; Committee: Ping Xu(Chair), Todd Kitten, Kimberly K. Jefferson, Ning Zhang

3. Scott-Elliston, Ayana (MS 2015-2017) Major: VCU Bioinformatics Peter Uetz (Chair)

4. Iyengar, Preethi (PhD. 2011-2016) Major: Molecular Biology and Genetics, Committee

5. Reed, Lucas (MS2014-2016) Major: Microbiology and Immunology, Committee

6. Bryan Chim (2014, VCU Bioinformatics) Self-supported.

7. Bingjie Xue (2013-2014, VCU Bioinformatics) self-supported

8. Han Zhong (MD. VCU 2013 Summer) VCU MIDPH program supported.

9. Sawsan S. Atia (M.S. 2010-2012) MS Major: Molecular Biology and Genetics, VCU, Fulbright Scholarship supported, Title: Systematic Analysis of ABC transporters in Streptococcus sanguinis. Committees: Ping Xu(Chair), Gail Christin, MI Damaj

10. Gregory R. Mayes (M.S. 2010-2012) MS student, Major: Molecular Biology and Genetics, VCU Self supported. Committees: Ping Xu(Chair), Todd Kitten, Paul Fawcett

11. Victoria N. Stone (PhD 2009-2015) Major: Microbiology and Immunology, PhD student, NIH/Microbiology Dept, VCU, Committees: Ping Xu(Chair), Todd Kitten, Glen Kellogg, Yan Zhang, Michael Holmes

12. Karra L. Evans (M.S. 2009-2011) Major: Microbiology and Immunology, MS Self supported, Title: Systematic analysis of the chain length related genes in Streptococcus sanguinis. Committees: Ping Xu(Chair), Todd Kitten, Peter Moon Current. DDS, Dental School, Michigan University,

13. My N. Trinh (M.S. 2009-2011) Major: Microbiology and Immunology, MS Self supported, VCU, Title: Two-component systems of Streptococcus pneumonia in Endocarditis Virulence. Committees: Ping Xu(Chair), Cindy Munro, Todd Kitten. Current. DDS, Dental School,

14. Jenishkumar R Patel (M.S. 2008-2010) MS, Major: Molecular Biology and Genetics, Self supported, Current: self employed. Title: Environmental Responses Of Two-Component Systems In Streptococcus Sanguinis. Committees: Ping Xu(Chair), Cindy Munro, Todd Kitten

15. Phavitri C.Ramcharan,(M.S. 1998-2000) Major: Microbiology and Immunology, MS, Virginia State University Supported Current: Specialist Merck Co. Committees: Ping Xu(Chair), Gregory Buck, Limin Wen

16. Chen Qing (M.S. 1996-1999) Zhejiang University supported Current, Senior Scientist, New Jersey company

17. Xue Chaoyang (M.S. 1994-1997), Zhejiang University supported, Current: Assistant Professor, University of Medicine and Dentistry of New Jersey

18. Huang Haining (M.S. 1993-96), Zhejiang University supported,,MS, Current: Scientist at Senomyx, Inc.

1. Zhong Jingping PhD. (1993-1996) Zhejiang University, Committee

2. He Zuhua PhD. (1992-1995) Zhejiang University, Committee

3. Li Shijun. PhD. (1992-1995) Zhejiang University, Committee

4. Ge Yingling PhD. (1992-1995) Zhejiang University, Committee

Undergraduate students trained (degree and year)

1. Lupton , Alex (2022-2023), VCU Bioinformatics

2. Spalding, Reid,(2022-2023), VCU Bioinformatics

3. Ranganathan, Akshaya (2022-2023), VCU Bioinformatics

4. Bala, Mohammad Mikail (2022-2023), VCU Bioinformatics

5. Yao Kathleen (2021-2022), UVA Microbiology

6. Musaddiq Lodi (2021-2022) VCU Bioinformatics

7. Dyu Tran (2021-2022) VCU Bioinformatics

8. Arashpreet Singh (2020-2022) VCU Bioinformatics

9. Ashria Arora (2019-2020) VCU Biology

10. Haider Nadhem (2019-2020) VCU Biology

11. Madison Tang (2017-2018) UVA Biology

12. Eric Newsome (2017-2018) VCU Biology

13. Navpreet Saini (2015-2016) VCU Biology

14. Suquoia Mosby (2015-2016) VCU Biology

15. De Guzman Eison (2015-2016) MIDPH

16. Abdallah Maksoud (2015-2016) VCU Biology

17. Akhidenor, Tamika (2015-2016) MIDPH

18. Dylan Vu (2013-2014, VCU Biology) UROP program

19. Katherine Figueroa (2014-, VCU Bioinformatics), self-supported

20. Dong Kim (2013- , VCU Biology) self-supported

21. Tara Nulton (2012-2013, VCU Bioinformatics) NIH supported

22. Tyler D. Brobst (2012, UVA) MIPHD supported

23. Benzon H. Huynh (2011-12, VCU Biology), Summer student, self-supported,

24. Jui-Yu Chen(2011-12, VCU Biology), Summer student, self-supported,,

25. Alexander S. Matthews (2011-12, VCU Bioinformatics) HHMI Summer student, Research Assistant

26. Douglas R. Stevenson(2011-12, VCU Bioinformatics), HHMI supported

27. Sharon D. Dodson (2011 Biology), self-supported,,

28. Jacob Carey (2011, VT), MIPHD

29. Jordan L Niermeyer(2011-12, VCU Bioinformatics), HHMI Summer student, Research ssistant

30. Ho Yan Chan (2010-11, VCU Biology), Summer student self-supported,

31. Robel H. Wolde(2010, VCU Bioinformatics), Summer student self-supported,

32. Nidhi Shah (2010, VCU Biology), Summer student self-supported,

33. Kanika Sharma (2010, VCU Biology) Summer student self-supported,

34. Eileen S. Zheng (2008-2010, Case Western), Summer student, NIH fund

35. Natalie Hendrick (2009, MIT), HHMI student,

36. Katie Vollmer (2007-2008, University of Delaware), BBSI students

37. Joe Moeller (2007-2008, Hiram College), BBSI students

38. Doruk Akan (2004-2006, UVA), BBSI students

39. Emily Colby (2003-2005, VCU), BBSI students

40. Graham Forbes (2003, UMI), Internal supported,

41. William A. Holzgrefe (2003-2005), UVA, AHA fund

High School students trained (year)

1. Xie, Chris 2017 HS

2. Zai, Richard 2017 HS

3. Matthew Xu 2017 HS

4. Kelvin Li 2014, Governor HS

5. Madison Tang 2014, Governor HS

6. John Yi, 2012, Godwin HS

7. Joan Liu, 2012, George Stevens Academy, Blue Hill, Maine

8. Daniel Chen 2011

9. Sam Lai, 2010, Godwin HS

10. Arjun Venkatasubramanian, 2010

11. Christine Anh-Thu Tran, 2010

12. John Yi, 2009 Godwin HS

13. Xue Zhou, 2005, Governor HS

Technician trainees

1. Tara J. Nulton (2012-2014). NIH supported

2. Jenishkumar R Patel (2010-2011) NIH supported, Current: Self-employed.

3. Xiaojing Wang (2008-2011), NIH supported, Current: Statistician, Emory University,

4. Cuie Sun, (2008-2011), NIH supported, Current: Psychiatry Institute, VCU.

5. William A. Holzgrefe (1998-2000), NIH supported Current: Medical School, University of Maryland.

6. Galinea Kazanina (2001-2003), AHA/NIH supported Current: Specialist, George Washington University

7. Jianqun Lin (1996-1997), NSF/Zhejiang fund supported. Current: CEO, Genloci Biotechnologies Inc.

Other Postdoctoral and Graduate Student Committees

Year: Major: Degree: Title: Committee:

1. Zan Zhu (PhD 2017-2022) Major: Mechanical Engineering. Weining Wang (Chair), Ping Xu, Sheng-Chieh Chen, Ravi Hadimani, Ram Gupta

2. Sarang Saadat (2020- ), Major: Periodontist, Degree: Residency, Title: Committee: Zhao Lin(Chair), Ping Xu, Caroline Carrico, Thomas Waldrop

3. Tanya Marie Puccio (2016-2021), Major: OCMB, Degree: PhD, Title: Committee: Todd Kitten(Chair), Ping Xu, Janina P Lewis, Phillip Hylemon, Heather R Lucas

4. Baker, Shannon P. (2015-2020), Major: Microbiology, Degree: PhD, Title: “Examination of strain-dependent differences in S. sanguinis virulence and growth” Committee: Todd Kitten(Chair), Cynthia Cornelissen, Heather R Lucas, Darrell Peterson, Ping Xu

5. Scott-Elliston, Ayana (2015-2017), Microbiology, Master, Peter Uetz(Chair), Stephen Fong, Todd Kitten, Ping Xu

6. Lucas Reed (2015-2016) Microbiology, Master. Title: The Effects of Amixicile, A Pyruvate Ferredoxin Oxidoreductase Inhibitor, on Oral Treponemes. Richard Marconi(Chair) Todd Kitten, Ping Xu.

7. Preethi Iyengar (2011-2015) Microbiology PhD. Titile: Mysteries of the trypanosomatid maxicircles:

Characterization of the maxicircle genomes and

the evolution of RNA editing in the order Kinetoplastida. Gregory Buck (Chair), Kimberly Jefferson, Maria Rivera, Francine Cabral, Ping Xu

8. Rana D. Graham-Montaque (Dental Resisdent), 2010-2012) PhD.

9. Callahan, Jill E. (2007-11), Microbiology, PhD, Title: Functional Characterization of the Streptococcus sanguinis com Regulon. Todd Kitten(Chair), Francine Cabral, Paul M. Fawcett, Kimberly K. Jefferson, Ping Xu

10. Alejandro Miguel Rodriguez MS (2006-08) MS, Major: Microbiology and Immunology, Title: Physiological And Molecular Characterization Of Genetic Competence In Streptococcus Sanguinis. Committee: Todd Kitten(Chair), Paul Fawcett Ping Xu

11. Jim Ray Managbanag (2005-8) PhD, Major: Integrative Life Sciences, Title: Using Shortest-Path Network Analysis To Identify Genes That Modulate Longevity In Saccharomyces Cerevisiae. Committee: Tarynn Witten (Chair), Danail Bonchev, Lemont B. Kier, Fang-Sheng Wu, Ping Xu,

12. Michael E. Saylor (MS, 2008-2009) MS, Major: Bioinformatics, Title: Influenza Centers of Excellence and the Influenza Research Database Project at the National Institute of Allergy and Infectious Disease. Committee: Kayvan Najarian(Chair), Danail Bonchev, Ping Xu

13. Melissa Ray (PhD. Microbiology VCU) Major: Microbiology and Immunology, PhD, Committee:Kimberly Jefferson(Chair), Gail Christie, Robert Diegelmann, Phil Hylemon, Ping Xu

14. Rafael Rodriguez, (Dental Resisdent), Major: Periodontal diseases, 2008-2011 Resident, John Gunsolley(Chair), Thomas Waldrop, Ping Xu

15. Michael Chaplin, (MS, 2006-2008, VCU) MS

16. Jingwu Zheng (1996-1997, ZU) Postdoctoral Current: Professor of Plant Protection, Zhejiang University

17. Dongwei Hu (1996-1997, ZU) Postdoctoral. Current: Professor of Plant Protection, Zhejiang University.

18. Yong Liu (Ph.D. 1996-97, ZU) Major: Biotechnology and Plant Pathology, PhD,

19. Fucheng Ling (Ph.D. 1995-98, ZU) PhD, Current: Professor, Zhejiang University

20. Ling Qin (M.S. 1995-98, ZU) Major: Biotechnology and Plant Pathology, MS

21. Yijun Qi (M.S. 1995-98, ZU) Major: Biotechnology and Plant Pathology, MS, Current: Professor, School of Life Sciences, Tsinghua University

22. Qiaoling Jin (Ph.D. 1994-97, ZU) Major: Biotechnology and Plant Pathology, PhD, Current: Scientist, Argonne National Laboratory

23. Youren Tong (M.S. 1993-96, ZU) Major: Biotechnology and Plant Pathology, MS, Current: Instructor in Neurology, Harvard University

24. Yongjiea Yu (M.S. 1993-96, ZU) Major: Biotechnology and Plant Pathology, MS

25. Huawei Zhou (M.S. 1993-96, ZU) Major: Biotechnology and Plant Pathology, MS,

26. Jingping Zhong (Ph.D. 1993-96, ZU) Major: Biotechnology and Plant Pathology, PhD, Current: Scientist, CovX Inc. Pfizer.

27. Zuhua He (Ph.D. 1992-95, ZU) Major: Biotechnology and Plant Pathology, PhD, Current: Professor and Director of Sino-Korea Joint Research Program, Shanghai Institutes for Biological Sciences, Chinese Academy Sciences

28. Yingling Ge (Ph.D. 1992-95, ZU) Major: Biotechnology and Plant Pathology, PhD, Current: Professor and Chair Biochemistry Department, School of Medicine, Qingdong University

29. Shijun Li (Ph.D. 1992-95, ZU) Major: Biotechnology and Plant Pathology, PhD, Senior Specialist, Thermo Fisher Scientific

30. Hong Ruan (M.S. 1992-95, ZU) Major: Biotechnology and Plant Pathology, MS, Current: Associate Dean, City College, Zhejiang University

31. Xiongfong Chen (Ph.D. 1991-95, ZU) Major: Biotechnology and Plant Pathology, PhD, Current: Advance Biomedical Computing Center, NIH

Teaching Awards

1997 The Second Class National Ministry of Education Teaching Achievement Award (October 24, 1997) for "Exploration and practice of the construction of College of agriculture of molecular biology course”. This is a national award for creating and teaching the Molecular Biology course. This course also obtained the First Class Award of Teaching Achievement in Zhejiang Agriculture University and the First Class Award of Teaching Achievement in the Education Commission of Zhejiang Province before submitted for the National competition.

1993 The Distinguished Teacher Award, Zhejiang Agriculture University

**SERVICE ACTIVITIES**

Clinical Service

N/A

Service to the Profession, (National and International)

Service for Grant Reviewers

2023 ad hoc NIH Study Section,

2022 ad hoc NIH Study Section,

2021 ad hoc NIH Study Section,

2019 ad hoc NIH Study Section,

2018 ad hoc NIH Study Section,

2017 ad hoc NIH Study Section,

2015 ad hoc NIH Study Section,

2014 ad hoc NIH Study Section,

2014 ad hoc NIH Study Section, DSR

2013 Grant Review for MRC, Wellcome Trust, UK

2012-2018, Review for Chinese National Science Foundation Grants.

2013 ad hoc NIH Study Section

2011 ad hoc NIH Study Section

2010 ad hoc NIH Study Section

2010-2016 Grant Reviewer, Italian Ministry of Health

2010 ad hoc grant reviewer for Jeffress Trust,

2008 ad hoc grant reviewer for Jeffress Trust,

2005-2009, American Heart Association Grant Review Mid-Atlantic Study Section

1993-1997 Reviewer for Chinese National Science Foundation Grant.

1991-1997 Reviewer for Science and Technology Grant, Zhejiang Province

Service for conference and meetings

2011, Systems Biology Summit, Program Committee,

1997 the Steering/Program Committee for the 3rd Hangzhou International Symposium on Plant Pathology and Biotechnology

1994 the Steering/Program Committee for the 2nd Hangzhou International Symposium on Plant Pathology and Biotechnology

1991 the Program Committee for the 1st Hangzhou International Symposium on Plant Pathology and Biotechnology

Service to Scientific Communities

1992-1997 Executive Deputy Director of the Chinese Agriculture Ministry's Key Laboratory of Plant Pathology and Biotechnology.

1992-1997 The General Secretary of Biotechnology Society, Chinese Society for Biotechnology, Zhejiang Province

1986-1989 Chinese Young Phycological Scientist Society, President.

Service for Journal editorial and reviewers

2011-Present, Scientific Reports Editorial Board (Nature Publishing Groups)

2011-Present, PLoS ONE Editorial Board (Public Library of Science)

Applied and Environmental Microbiology

Archives of Oral Biology

BioTechniques

BMC Genomics

BMC Microbiology

BMC Systems Biology

Cellular and Molecular Life Sciences

Critical Reviews in Microbiology

FEBS Journal

Genome Biology

Genome Research

Infective Immunity

International Journal of Molecular Sciences

Journal of Bacteriology

Journal of Basic Microbiology

Journal of Biology

Journal of Molecular Biology

Molecular Microbiology

Molecular Oral Microbiology

Molecular Systems Biology

Nature Methods

Nucleic Acids Research

Odontology

Oral Diseases

PloS ONE

PloS Pathogens

Science in China

Scientific Reports

Trends in Microbiology

World Journal of Critical Infectious Diseases

Infection, Genetics and Evolution

etc..

Service to the University

2013-Present, Center for Clinical and Translational Research Endowment Fund Advisory Committee, VCU

2012-Present, Bioinformatics Program Committee. VCU

2011-2018, NextGen and Genomics Faculty Advisory Committee, VCU

2005-2018 peer-review for Full Professor Application in Zhejiang University

2011-2013, AD Williams Trust Fund Advisory Committee, VCU

2008 –2013, University Graduation Committee, VCU

1992-1997, University Scientific Research Committee, Zhejiang Agriculture University

1992-1997, University Graduation Committee, Zhejiang Agriculture University

1992-1997 Executive Deputy Director Biotechnology Institute, Zhejiang Agriculture University.

1990-1992 Coordinator for Establishing Biotechnology Institute at Zhejiang Agriculture University.

1990-1997 Member, Zhejiang Agriculture University, Molecule biologist search committee

Service to the School of Dentistry

2007 – 2018, School of Dentistry Research Committee, VCU