CURRICULUM VITAE

Weihang (Valerie) Chai, Ph.D.

Professor
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Gender: Female

Citizenship: US

RESEARCH INTERESTS

Genome stability (replication stress, DNA damage repair, telomere biology), cancer, aging

EDUCATION

2000 - 2005	Postdoc in Cell Biology, University of Texas Southwestern Medical Center at Dallas, TX (Mentors: Drs. Woodring E. Wright and Jerry W. Shay)
1994 - 1999	Ph.D. in Microbiology, Dept of Microbiology, Cornell University, Ithaca, NY (Mentor: Dr. Valley J. Stewart)
1987 - 1991	B.S. in Microbiology, Shandong University, Jinan, P. R. China (summa cum laude)

PROFESSIONAL POSITIONS

2019 – present	**Professor** (tenured), Department of Cancer Biology, Cardinal Bernardin Cancer Center, Loyola University Chicago Stritch School of Medicine, Maywood, IL
2014 – 2019	**Associate Professor** (tenured), Department of Biomedical Sciences, Elson S. Floyd College of Medicine, Washington State University (WSU), Spokane, WA
2008 – 2014	**Assistant Professor** (tenure-track), School of Molecular Biosciences and College of Medical Sciences, Washington State University, Pullman/Spokane, WA
2000 – 2005	**Postdoctoral Fellow**, Department of Cell Biology, the University of Texas Southwestern Medical Center, Dallas, TX
1995 – 1999	**Graduate Research Assistant**, Department of Microbiology, Cornell University, Ithaca, NY

OTHER PROFESSIONAL POSITIONS

2016 – 2019	**Board Member**, the inaugural Cancer Research Endowment Authority Board, the State of Washington Governor's Office
2012 – 2019	**Scientific Director**, Microscopy Imaging Core Facility at WSU

2014 – 2016	**Group Leader**, WSU Cancer and Aging Research Group
2015 – 2019	**Associate Faculty**, School of Molecular Biosciences, WSU
2014 – 2019	**Affiliate Faculty**, Department of Pharmaceutical Sciences, WSU
2009 – 2019	**Associate Faculty**, Center for Reproductive Biology, WSU
2009 – 2019	**Member**, Institute of Translational Health Sciences, the State of Washington
2009 – 2015	**Affiliate Faculty**, Department of Biochemistry and Department of Immunology, University of Washington School of Medicine

PROFESSIONAL MEMBERSHIPS

2017 - present	Association of American Medical Colleges (AAMC) Group on Women in Medicine and Science
2012 - present	American Society for Biochemistry and Molecular Biology
2002 - 2019	American Association for Cancer Research
1998 - present	American Association for the Advancement of Science

HONORS AND AWARDS

2014	Nominated for Junior Faculty Award, WSU.
2007	Chancellor's Research Fellow, Texas Woman's University
2005	Scholarship Award from Keystone Symposium in Genome Instability and Repair
2004	The Scholar-in-Training Award from American Association for Cancer Research
2004	The American Aging Association Paul Glenn Award for meritorious research in biomedical gerontology
2003 – 2004	NIH Ruth L. Kirschstein National Research Service Award Individual Fellowship
2001	NIH Institutional Postdoctoral Research Fellowship in Microbiology
1997	American Society for Microbiology Travel Grant for Graduate Student
1988 – 1991	Shandong University Outstanding Undergraduate Fellowship each year for three years

RESEARCH SUPPORT

Ongoing:

1. TITLE: Molecular modulator of RPA and RAD51 in maintaining genome stability
   AGENCY: NIH/NCI R01CA234266 (Score: 4 percentile)
   DATES: 1/1/2019-12/31/2023
   ROLE: PI
   TOTAL COST: $1,671,632

2. TITLE: Mechanism of fork restart in response to genotoxic stress
   AGENCY: NIH/NIGMS: R01GM112864 (Score: 4 percentile)
   DATES: 9/15/2014-8/31/2019, NCE to 9/31/2020

ROLE: PI
TOTAL COST: $1,453,375

3. TITLE: Role of Telomerase in DSB Repair
AGENCY: NIH/NCI: R03CA223625 (Impact Score: 14)
DATES: 12/1/17-11/30/19, NCE to 11/30/2020
ROLE: PI
TOTAL COST: $153,000

Completed:

1. TITLE: Brown Adipose Tissue and Sleep Regulation
AGENCY: NIH/NILHB: R01HL122390
DATES: 2/1/15-1/31/18
ROLE: co-I
TOTAL COST: $1,887,500

2. TITLE: Role of human CST in preventing telomere loss
AGENCY: NIH/NIA: R56AG046292
DATES: 9/30/2015-8/31/2017
ROLE: PI
TOTAL COST: $377,500

3. TITLE: Investigation into Mechanisms of CDK1 in Controlling Telomere Stability
AGENCY: NIH/NIA: R21AG041375
DATES: 9/30/12-8/31/15
ROLE: PI
TOTAL COST: $415,250

4. TITLE: Mechanism for Telomeric G-overhang Generation in Human Cells
AGENCY: NIH/NIGMS: R15GM099008
DATES: 9/1/2011-8/31/2015
ROLE: PI
TOTAL COST: $301,444

5. TITLE: Function of FEN1 in telomere maintenance
AGENCY: NIH/NCI: R15CA132090
DATES: 9/1/08-8/30/11
ROLE: PI
TOTAL COST: $224,250

6. TITLE: Function of CST in telomere maintenance and cancer cell growth
AGENCY: CONCERN Foundation, Conquer Cancer Now Award
DATES: 7/1/12-6/30/14
ROLE: PI
TOTAL COST: $120,000

7. TITLE: Functions of Stn1 in telomere protection
AGENCY: American Cancer Society Institutional Grant
DATES: 1/1/2010-12/31/2011
ROLE: PI
TOTAL COST: $60,000

8. TITLE: Identification of fragile sites in the human genome with ChIP-seq
AGENCY: Illumina Inc.
DATES: 7/1/15

ROLE: PI
TOTAL COST: $5,000

9. TITLE: TITLE: Mechanism of CDK1-regulated telomere synthesis
AGENCY: WSU
DATES: 9/1/2010-8/31/2011
ROLE: PI
TOTAL COST: $6,250

PUBLICATIONS [* denotes corresponding author, **IF**: impact factor]

1. Lyu, X., Lei, K-H., Shiva, O., Chastain, M., Chi, P., ***Chai, W**. (2019) Human CST complex protects replication fork stability by directly blocking MRE11 degradation of nascent strand DNA. BioRxiv, Oct 08 2019, doi: https://doi.org/10.1101/797647
2. Lyu, X., Chastain, M. ***Chai, W**. (2019) Genome-wide mapping and profiling of γ H2AX binding hotspots in response to different replication stress inducers. ***BMC Genomics***. 20 (1): 579. PubMed PMID: 31299901
3. Wang, Y., ***Chai, W.** (2018) Pathogenic CTC1 mutations cause global genome instabilities under replication stress. ***Nucleic Acids Res***. 46 (8): 3981-3992. PMID: 29481669 (IF: **10.162**)
4. Jia P., ***Chai W.** (2018) The MLH1 ATPase domain is needed for suppressing aberrant formation of interstitial telomeric sequences. ***DNA repair***. 65:20-25. PMID: 29544212 (IF: **3.61**)
5. Huang, C., Jia, P., Chastain, M., Shiva, O., Dai, X., ***Chai, W.** (2017) The Human CTC1/STN1/TEN1 Complex Localizes in ALT-Associated PML Bodies and Regulates Telomere maintenance in ALT cancer cells. ***Exp Cell Res.*** 355(2):95-104. PMID: 28366536 (IF: **3.546**)
6. Jia, P., Chastain, M., Zou, Y., Her, C., ***Chai, W.** (2017) Human MLH1 suppresses the insertion of telomeric sequences at intra-chromosomal sites in telomerase-expressing cells. ***Nucleic Acids Res***. 45 (3): 1219-1232. PMID: 28180301. (IF: **10.162**)
7. Chastain, M., Zhou, Q., Shiva, O., Whitmore, L., Jia, P., Dai, X., Huang, C., Fadri-Moskwik, M., Ye, P., ***Chai, W**. (2016) Human CST facilitates genome-wide RAD51 recruitment to GC-rich repetitive sequences in response to replication stress. ***Cell Reports.*** 16(5): 1300-14. PMID: 27487043 (IF: **8.358**)
8. Zhou, Q.V., Sampathi, S., ***Chai, W**. (2016) Suppression of STN1 Enhances the Cytotoxicity of Chemotherapeutic Agents in Cancer Cell Lines by Increasing DNA Damages. ***Oncology Letters**,* 12: 800-808. PMID: 27446354 (IF: **1.39**)
9. Jia, P., Her, C., ***Chai, W**. (2015) DNA Excision Repair at Telomeres. ***DNA Repair***. 36:137-45. PMID: 26422132 (IF: **3.929**)
10. Chung, L., Onyango, D., Guo, Z., Jia, P., Dai, H., Lin, W., Pang, I., Li, H., Yuan, Y., Huang, Q., Zheng, L., Lopes, J., Nicolas, A., **Chai, W.**, Raz, D., Reckamp, K.L., Shen, B. (2015) The FEN1 E359K mutation isolated from a breast cancer patient disrupts the FEN1-WRN interaction and FEN1 GEN activity, causing aneuploidy-associated cancers. ***Oncogene***. 34(7):902-11. PMID: 24608430 (IF: **7.932**)
11. Shi, J., Yang, X.R., Ballew, B., Rotunno, M., Calista, D., Fargnoli, M.C., Ghiorzo, P, Bressac-de Paillerets, B., Nagore, E., Avril, M.F., Caporaso, N.E., McMaster, M.L., Cullen, M., NCI DCEG Cancer Sequencing Working Group, NCI DCEG Cancer Genomics Research Laboratory, French Familial Melanoma Study Group, Bruno, W., Pastorino, P., Queirolo, P., Banuls-Roca, J., Garcia-Casado, Z., Vaysse, A., Mohamdi, H., Riazalhosseini, Y., Foglio, M., Jouenne, F., Hua, X., Hyland, P.L., Yin, J., Vallabhaneni, H., **Chai, W.**, Minghetti, P., Pellegrini, C.,

Ravichandran, S., Eggermont, S., Lathrop, M., Peris, K., Scarra, G.B., Landi, G., Savage, S.A., Sampson, J.N., He, J., Yeager, M., Goldin, L.R., Demenais, F., Chanock, S.J., Tucker, M.A., Goldstein, A.M., Liu, Y., Landi, M.T. (2014) Rare missense variants in POT1 predispose to familial cutaneous malignant melanoma. ***Nature Genetics*** 46(5):482-6. PMID: 24686846 (IF: **31.616**)

12. Fadri-Moskwik, M., Zhou, V., ***Chai, W**. (2013) Beyond telomerase: Telomere instability as a novel target for cancer therapy. ***J Mol. and Genet. Med.***. 7(4). pii: 91. PMID: 27123041
13. Lin, W., Sampathi, S., Dai, H., Liu, C., Zhou, M. Hu, J., Huang, Q., Campbell, J., Zheng, L., ***Chai, W.,** Shen, B. (2013) Mammalian DNA2 cleaves G-quadruplex DNA and is required for telomere integrity. ***EMBO J.*** 32(10):1425-39. PMID: 23604072 (*co-corresponding author) (IF: **10.434**)
14. ***Chai, W**., Zheng, L., Shen, B. (2013) DNA2, a new player in telomere maintenance and tumor suppression. ***Cell Cycle*** 12(13):1985-6 PMID: 23759580. (IF: **5.006**)
15. Huang, C., Dai, X., and ***Chai, W**. (2012) Human Stn1 protects telomere integrity by promoting efficient lagging-strand synthesis at telomeres and mediating C-strand fill-in. ***Cell Research*** 22 (12) 1681-1695. PMID: 22964711 (**Cover page article**) (IF: **14.812**)
16. Dai, X., Huang, C., and ***Chai, W**. (2012) CDK1 differentially regulates G-overhang generation at leading- and lagging-strand telomeres in telomerase negative cells in the G2 phase. ***Cell Cycle*** 11 (16) 2959-3142. PMID: 22871736 (IF: **5.243**)
17. Gu, P., Min, J., Wang, Y., Huang, C., **Chai, W**. and Chang, S. (2012) CTC1 deletion results in defective telomere replication, leading to catastrophic telomere loss and stem cell exhaustion. ***EMBO J.*** 31(10):2309-21. PMID: 22531781. (IF: **10.434**)
18. Wu, X., Xu, Y., **Chai, W**. and Her, C. (2011) The causal link between microsatellite instability and hMRE11 dysfunction in human cancers. ***Molecular Cancer Res.*** 9(11):1443-8. (IF: **4.288**)
19. Sampathi, S. and ***Chai, W**. (2011) Mapping the domain of FEN1/hTERT association. ***Biochem Biophys Res Comm.*** 407 (1): 34-38.
20. Sampathi, S. and ***Chai, W**. (2011) Telomere replication: poised but puzzling. ***J. Cellular and Molecular Medicine***. 15(1): 3-13. (IF: **4.125**)
21. Dai, X., Huang, C., Bhusari, A., Sampathi, S, Schubert, K. and ***Chai, W**. (2010) Molecular steps of G-overhang generation at human telomeres and its function in chromosome end protection. ***EMBO J.*** 29(16):2788-801. PMID: 20639858 (IF: **10.434**)
22. Sampathi, S, Bhusari, A., Shen, B., ***Chai, W**. (2009) Human flap endonuclease I is in complex with telomerase and is required for telomerase-mediated telomere maintenance. ***J. Biol. Chem.*** 284(6):3682-90. PMID: 19068479 (IF: **6.14**)
23. Gardner, J.P., Kimura, M., **Chai, W**., Durrani, J.F., Tchakmakjian, L. Cao, X., Lu, X., Li, G., Peppas, Skurnick, T.J., Wright, W.E., Shay, J.W., Aviv, A. (2007) Telomere dynamics in macaques and humans. ***J. Gerontology: Biol. Sci. Med. Sci.***, 62(4): 367-374.
24. **Chai, W**., Du, Q., Shay, J. W., Wright, W.E. (2006) Human telomeres have difference overhang sizes at the leading versus lagging strands. ***Molecular Cell*** 21(3): 427-435. (IF: **14.018**)
25. **Chai, W**., Sfeir, A.J., Hoshiyama, H., Shay, J.W., Wright, W.E. (2006) The involvement of the Mre11/Rad50/Nbs1 complex in the generation of G-overhangs at human telomeres. ***EMBO Reports***. 7(2):225-230. (IF: **10.434**)
26. Sfeir, A.J., **Chai, W.**, Shay, J.W., Wright, W.E. (2005) Telomere end processing: the last base

of mammalian chromosomes. ***Molecular Cell*** 18 (1): 131-138. (IF: **14.018**)

27. **Chai, W.**, Shay, J. W., Wright, W.E. (2005) Human cells maintain their telomere overhangs at senescence. ***Mol. Cell Biol.*** 25 (6): 2158-2168.
28. Sawyer, S., Cheng I.H., **Chai, W.**, and Tye, B.K. (2004) Mcm10 and Cdc45 cooperate in origin activation in *Saccharomyces cerevisiae*. ***J. Mol. Biol.*** 340 (2): 195-202**.**
29. **Chai, W.**, Ford, L.P., Lenertz, L., Wright, W.E., Shay, J.W. (2002) Human Ku70/80 associates physically with telomerase through interaction with hTERT. ***J. Biol. Chem.*** 277, 47242-47247.
30. **Chai, W**. and Stewart, V. (1999) RNA sequence requirements for NasR-mediated, nitrate-responsive transcription antitermination in the *Klebsiella oxytoca* M5al *nasF* operon leader. ***J. Mol. Biol.*** 292 (2): 203-216
31. **Chai, W**. and Stewart, V. (1998) NasR, a novel RNA-binding protein, mediates nitrate-responsive transcription antitermination of the *Klebsiella oxytoca* M5al *nasF* operon leader in vitro. ***J. Mol. Biol.*** 283 (3), 339-351
32. Wu, Q, **Chai, W.**, Lin, J. T. and Stewart, V. (1999) General nitrogen regulation (Ntr) of nitrate assimilation regulatory gene *nasR* expression in *Klebsiella oxytoca* M5al. ***J. Bacteriology*** 181 (23): 7274-7284

INVITED LECTURES

2019

55. Department of Radiation Oncology, the University of California Davis, Sacramento, CA
54. Scintillon Institute, San Diego, CA
53. Department of Pharmacology, Case Western Reserve University School of Medicine, Cleveland, OH
52. Department of Molecular and Cellular Biology, Roswell Park Comprehensive Cancer Center, Buffalo, NY

2018

51. Department of Cancer Biology, Loyola University Stritch School of Medicine, Chicago, IL
50. The Center for Childhood Cancer and Blood Diseases, Nationwide Children's Hospital, Ohio State University, Columbus, OH
49. National Institute on Aging, Biomedical Research Center, Baltimore, MD
48. Robert Wood Johnson Medical School, Division of Radiation Cancer Biology, Rutgers University, New Jersey
47. CBIS 12th Biennial Meeting, Genome Maintenance Session, Shenzhen, China
46. Experimental Biology Annual Meeting, San Diego, CA
45. DNA Metabolism, Genomic Stability and Human Disease, Cold Spring Harbor Asia Meeting.
44. Genome Instability and DNA Damage in Aging and Cancer session, the Journal of Molecular Cell Biology Symposium, Shanghai, China
43. College of Life Sciences, Nan-Kai University, Tianjin, China

2017

42. Institute of Molecular Biology, Academia Sinica, Taiwan

41. Department of Cell Stress, Roswell Park Cancer Center, Buffalo, NY
40. Society of Chinese Bioscientists in America, the 16th International Symposium, Hangzhou, China
39. Smerdon/Reeves Lectureship at WSU
38. Department of Biomedical Sciences, ESF College of Medicine, WSU

2016
37. Telomere Biology in Health and Disease, Paris, France
36. Department of Biochemistry and Molecular Medicine, the GW Cancer Center, George Washington University School of Medicine and Health Sciences
35. National Translational Science Center for Molecular Medicine, and Cell Engineering Research Center, the Fourth Military Medical University, Xi'an, China
34. Department of Cell Biology, College of Medicine, Shandong University, Jinan, China

2015
33. Department of Molecular Biology, Université of Genève, Switzerland
32. Department of Biochemistry, NCI Comprehensive Cancer Center, Wake Forest University School of Medicine
31. Mitchell Cancer Institute, University of South Alabama
30. DNA Repair in Chromatin: The First 40 Years (And Beyond), 1st Biennial Smerdon/Reeves Lectureship at Washington State University
29. Telomere and Telomerase Meeting, Cold Spring Harbor Laboratory, New York

2014
28. Washington State University, Department of Pharmaceutical Sciences

2013
27. Telomere and Telomerase Meeting, Cold Spring Harbor Laboratory, New York
26. Gondon Research Conference on Mammalian DNA Repair, Ventura, California
25. Washington State University, Department of Biology, Earth, and Environmental Science, Vancouver, Washington

2012
24. Cancer Hospital, Fudan University, Shanghai, China
23. Providence Sacred Heart Medical Center, Spokane
22. Department of Biology, Eastern Washington University

2011
21. City of Hope NCI-designated Comprehensive Cancer Center and Beckman Research Institute, Dept of Cancer Biology, Duarte, California
20. 13th Annual Northwest Reproductive Sciences Symposium, Oregon State University
19. Riverpoint Biomedical Research Seminar Series, Spokane, Washington

2010
18. Gonzaga University, Dept of Biology.

2009
17. University of Idaho, Dept of Microbiology, Molecular Biology & Biochemistry
16. Washington State University, School of Molecular Biosciences

2008
15. University of California at Merced, School of Natural Sciences
14. BIT Life Sciences' World Cancer Congress, "Molecular & Cell Biology in Oncology" Session, Shanghai
13. Washington State University, School of Molecular Biosciences

2007 12. Houston Center for Clinical and Translational Science, the Methodist Hospital Research Institute, Houston, TX.

11. University of Texas at Arlington, Department of Biology

2006 10. University of North Texas Health Science Center, Department of Immunology and Molecular Biology

9. Texas Woman's University, Department of Biology.

8. 97th AACR Annual Meeting, Washington D.C.

2005 7. Keystone Symposium: Genome Instability and Repair, New Mexico.

6. Texas Woman's University, Department of Biology.

5. Ambion Inc. Austin, TX

4. Shandong University, Dept of Microbiology, Shandong, P.R. China

2004 3. AACR Conference: The Role of Telomeres and Telomerase in Cancer, California.

1998 2. West Coast Bacterial Physiologists Annual Conference, California

1. Molecular Genetics of Bacteria & Phages Meeting, Cold Spring Harbor

SPECIAL FACULTY DEVELOPMENT ACTIVITIES

1. "Association of American Medical Colleges Women Faculty Leadership Development Seminar," American Association Medical Colleges. 12/1/2017 – 12/5/2017.
2. "Write Winning Grants Workshop", WSU, 2010 - 2011.
3. NIH Human Embryonic Stem Cell Culture Course, CHOC Children's Research Institute, California, 2009

SERVICES

Grant Review Panels and Study Sections:

2020-2024 Standing Member, NIH MGA (Molecular Genetics A) (tentative, to be confirmed)

2019 Reviewer, NIH CE (Cancer Etiology) Study Section

Reviewer, NIH MGA (Molecular Genetics A) Study Section

2018 Reviewer, the University of California Multi-campus Research Initiatives Biological, Life, and Health Sciences Panel

2017 Reviewer, Research Foundation of the City University of New York

2017 Reviewer, Netherlands Organization for Scientific Research (the Dutch Research Council)

2016 Reviewer, NIA Study Section Panel ZAG1 ZIJ-9 (A1)

2015 Reviewer, NCI Omnibus R21 & R03 SEP study section ZCA1 SRB-L (J1)

2015 Reviewer, NIH CMAD (Cellular Mechanisms in Aging and Development) Study Section

2014 Reviewer, NCI Study Section Panel ZRG1 OBT-S (02M)

2013 – 2014 Reviewer, NSF Graduate Research Fellowship Program Panelist

2008 Reviewer, Bankhead-Coley Biomedical Cancer Research Program managed by Florida Department of Health

Reviewer, Italian Ministry of Health "Young Italian Researchers Call"

Editorial Service:

2013 – present **Editorial Board member**: Journal of Molecular and Genetic Medicine

2011 – present **Associate Editor**: Journal "Frontiers in Cancer Molecular Targets and Therapeutics"

ad hoc Reviewer for journals:

Nature Chemical Biology,
EMBO Journal,
Nucleic Acids Research,
Cancer Research,
BMC Genomics,
Molecular and Cellular Biology,
Computational and Structural Biotechnology Journal,
Journal of Cellular and Molecular Medicine,
Mechanisms of Ageing and Development,
Journal of Molecular Cell Biology,
Frontiers in Cancer Molecular Targets and Therapeutics,
Experimental Cell Research,
Current Medicinal Chemistry,
BioTechniques,
DNA Repair,
Scientific Reports,
PLoS One,
Trends in Cell Biology,
Genes
Cell & Bioscience

The State of Washington:

2016 – 2019 Board member, the inaugural Cancer Research Endowment Authority (CARE) Board

WSU:

Departmental level:

2018 Chair, Faculty Search Committee, Department of Biomedical Sciences

2014 – 2019 Faculty Advising committee member for tenure-track Assistant Professor Dr. Jingru Sun

2014 – 2019 Faculty Advising committee member for tenure-track Assistant Professor Dr. Bin Shan

2014 – 2015 Member, Graduate Program Committee, School of Molecular Biosciences

2013 – 2015 Member, Graduate Studies Committee, School of Molecular Biosciences

2012 – 2013	Member, Faculty search committee for recruiting 5 Assistant/Associate/Full Professors for the College of Medical Sciences
2012	Member, Faculty search committee for recruiting WWAMI Clinical Professor
2010	Member, WWAMI Anatomy faculty recruiting committee

College level:

2015 – 2019	Member, ESF College of Medicine Faculty Rank, Tenure and Promotion Committee

Campus/across college level:

2014 – 2019	Scientific Director, the Microscope Imaging Core at WSU
2014 – 2016	Group Leader, the Cancer and Aging Research Group, WSU
2014 – 2019	Faculty Advising committee member for tenure-track Assistant Professor Dr. Shobhan Gaddameedhi
2015 – 2016	Member, Faculty search committee for recruiting 3 Assistant/Associate/Full Professors for the Department of Pharmaceutical Sciences, College of Pharmacy
2014 – 2015	Member, Faculty Search Committee for the Department of Experimental and Systems Pharmacology
2013 – 2014	Directing the purchase of major core equipment for the new Pharmaceutical and Biomedical building
2010 – 2011	Member, WSU Pharmaceutical and Biomedical Building Design Planning Committee

University level:

2016 – 2017	Member, Smerdon/Reeves Lecture-Symposium Planning Committee
2016 – 2017	Member, WSU Genomics Focus Group
2015	WSU Research Grand Challenges Leadership Team

Community volunteering activities:

2016	Lecture on Immunology to 7th graders at Libby Center Middle School
2015	Discussion about the immune system to 7th graders at Libby Center Middle School
2010	Participation of American Cancer Society fund raising activity

Outreach Activities:

1. Interview with Spokesman Review (newspaper), Interview was published on December 19, 2017 http://www.spokesman.com/stories/2017/dec/23/wsu-spokane-nets-10-million-for-scientific-health-/

2. Recruit and supervise undergraduate students from surrounding colleges (Gonzaga University, Easter Washington University) in biomedical research, 2009, 2010, 2011, 2012
3. Interview with “Inlander” (newspaper). 5/25/2011
4. Career advising for one student at University High School, Spokane Valley, 2010
5. Interview with Spokane Journal of Business (newspaper) about cancer research. Interview was published on 8/27/2010 https://www.spokanejournal.com/local-news/what-if-cancer-cells-couldnt-reproduce/
6. Interview with Spokane KREM TV Channel about cancer research. Interview was aired on 9/16/2010
7. Interview with WSU News about cancer research. Interview was published online 7/16/2010 https://www.eurekalert.org/pub_releases/2010-07/wsu-wrf070910.php

TEACHING and MENTORING

Education Directorship

2011 – 2014 Course Chair, the medical student Immunology course

Classroom Instruction:

Medical student courses

2018	Fall semester, MED FMS 511 – Case-based learning, Facilitator
2015	Spring semester, MEDS 523 – Immunology, Instructor
2014	Spring semester, MEDS 523 – Immunology, Course Chair and Instructor
2013	Spring semester, MEDS 523 – Immunology, Course Chair and Instructor
2012	Spring semester, MEDS 523 – Immunology, Course Chair and Instructor
2011	Spring semester, MEDS 523 – Immunology, Course Chair and Instructor
2010	Spring semester, MEDS 523 – Immunology, Instructor
2009	Fall semester, MEDS 524 – Biochemistry, Instructor
2008	Fall semester, MEDS 524 – Biochemistry, Guest Lecturer

Graduate courses

2020	Spring semester, Biochemistry and Molecular Biology 417.
2007	Spring semester, BACT6544 – Viral DNA vectors, Lecture and Lab instructions, 6 credit hours, Sole Instructor
2006	Spring semester BACT6544 – Viral DNA vectors, Lecture and Lab instructions, 6 credit hours, Sole Instructor
	Fall semester BACT6534 – Plasmid DNA vectors, Lecture and Lab instructions, 6 credit hours, Sole Instructor
2005	Fall semester, BACT6534 – Plasmid DNA vectors, Lecture and Lab instructions, 6

credit hours, Sole Instructor

Undergraduate courses

2008	Spring semester, BACT4113 – Immunology, 3 credit hours, Sole Instructor
2007	Spring semester, BACT4113 – Immunology, 3 credit hours, Sole Instructor
	Fall semester, ZOOL3313 – Biology of Aging, 3 credit hours, Sole Instructor
2006	Spring semester, BACT4113 – Immunology, 3 credit hours, Sole Instructor
	Fall semester, BIOL1003 – 21st Century Biology, 3 credit hours, Co-Instructor

Mentoring and Advising:

Senior Research Scientist:

1. Dr. Eugene Kim, 2018 – present

Postdocs:

1. Dr. Duc Nguyen, 2019 – present
2. Dr. Xinxing Lyu, 2016 – present
3. Dr. Yuan Wang, 2016 – 2018 (Position after leaving: Postdoc, Rutgers University)
4. Dr. Faya Zhang, 2017 (Position after leaving: Postdoc, College of Pharmacy, WSU)
5. Dr. Pingping Jia, 2012 – 2016 (Position after leaving: Professor, Institute of Medicinal Biotechnology, Chinese Academy of Medical Sciences, Peking Union Medical College)
6. Dr. Vivian (Qing) Zhou, 2013 – 2015 (Position after leaving: Postdoc, Columbia University)
7. Dr. Maria Fadri-Moskwik, 2012 – 2014 (Position after leaving: Instructor, Wake Technical Community College, North Carolina)
8. Dr. Chenhui Huang, 2009 – 2013 (Position after leaving: Associate Investigator, Shanghai Institute of Biochemistry and Cell Biology, Chinese Academy of Sciences)
9. Dr. Xueyu Dai, 2009 – 2012 (Position after leaving: Associate Investigator, Institute Pasteur of Shanghai, Chinese Acadamy of Sciences)

Graduate students:

1. Shilpa Sampathi, 2006 – 2011, doctoral dissertation major advisor, School of Molecular Biosciences, **Awarded with SMB Travel grant as well as the Poncin Fellowship** 7/1/11-6/30/12, passed PhD defense 10/2011. Current position: Instructor at Vanderbilt University School of Medicine, Ingram Cancer Center, Nashville, TN.
2. Aneesa Al Soodani, 2011 – 2017, School of Molecular Biosciences, doctoral dissertation committee member. Passed defense in 2017.
3. Diana Browning, 2015 – 2016, School of Molecular Biosciences, doctoral dissertation committee member. Passed defense in 2016.
4. Emily Johnson, 2012 – 2015, Department of Experimental and System Pharmacology, College of Pharmacy, doctoral dissertation committee member. Awarded with NSF graduate student

fellowship. Passed defense in 2015.

5. Emiliano Reed, 2015, School of Molecular Biosciences, Rotation Research Advisor.
6. Olga Shiva, 2011, School of Molecular Biosciences, Rotation Research Advisor.
7. Amruta Bhusari, 2006-2008, Master dissertation advisor
8. Amruta Mahadik, 2007-2008, Master dissertation advisor
9. Sanjana Sudarshan, 2007-2008, Master dissertation advisor

Undergraduate students:

1. Jacob Mallery, School of Molecular Biosciences STARS program, 2015 summer rotation, 2016 summer rotation
2. Lily Seyoum, WSU College of Nursing, Jan 2015 – May 2015
3. James Heusner, from the University of Washington, June 2013 - Aug 2013
4. Natalie Schennum, from Gonzaga University, Aug 2011- July 2012
5. Olga Shiva, from EWU, March 2011- June 2011, admitted to the graduate program at SMB in WSU.
6. Cora Hartill from EWU, Aug 2010- Feb 2011, admitted to a Medical Technology program.
7. Annie Morgan from Harvard University, May-Aug 2010 and Jan 2013, graduated from Harvard University in 2013 and then admitted to the MD/PhD program at Stanford University.
8. Kathryn Schubert from Gonzaga University, May 2009-May 2010, admitted to the PhD program at Oregon Health & Science University.
9. Alex Diamond from Gonzaga University, Feb-May 2009
10. Lakita Johnson, 2006-2008, NIH MBRS fellowship
11. Danyeal Heckard, 2006-2008, NIH MBRS fellowship
12. Amber Thomas, 2005-2008, NIH MBRS fellowship
13. Cynthia Vasquez, 2007-2008

High school students:

1. Helen Yuan from Central Valley High School in Spokane Valley, May 2009-Aug 2009, admitted to the University of Southern California
2. David Yuan from Central Valley High School in Spokane Valley, May 2011-Aug 2011, admitted to the University of Washington

Research Assistants:

1. Olga Shiva, 2013 - 2019
2. Megan Chastain, 2014 – 2019
3. Bryce Burnett, Jan – May 2016

4. Elizabeth Everson, 2018 – 2019
5. Thanh Nguyen, 2019 - present