WANG, YING PH.D. ASSISSTANT PROFESSOR

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Email: wang@biology.msstate.edu

EDUCATION

Ph.D. (2010) Department of Plant Cellular & Molecular Biology, Ohio State University, Columbus, Ohio B.S. (2004) College of Biological Sciences, Wuhan University, China

CAREER DEVELOPMENT

2017-Present Assistant Professor, Department of Biological Sciences, Mississippi State University

2016 Research Scientist, Department of Molecular Genetics, Ohio State University

2010-2016 Postdoctoral Researcher, Department of Molecular Genetics, Ohio State University

FUNDING

Active Projects:

- 3. NSF (MCB-2145967): <u>Structural insights into RNA promoters for RNA polymerase II-catalyzed RNA-templated transcription</u>, solo PI with a budget of \$522,761. (04/2022 to 03/2025).
- 2. NIH (1R15GM135893): <u>Understanding the regulatory role of a eukaryotic transcription factor in RNA-templated transcription catalyzed by DNA-directed RNA polymerase II,</u> solo PI with a budget of \$410,855. (08/2020 to 07/2023)
- 1.NSF (MCB-1906060): <u>Processing-body dynamics and mRNA regulation in plants</u>, CoPI. Total project budget: \$1,200,000 (PI: Jyan-Chyun Jang at Ohio State University; CoPI: Ping He and Libo Shan at Texas A&M University, Ying Wang at Mississippi State University); Wang lab budget: \$220,000. (09/2019 to 08/2023)

Completed Projects:

NSF Plant Genome Research Project (IOS-1564366): <u>Exploitation of Genetics and Epigenetic Variation in the Regulation of Tomato Fruit Quality Traits</u>, CoPI. Total project budget: \$5,018,470 (PI: Esther van der Knaap at University of Georgia; CoPI: Ana Caicedo at University of Massachusetts, Denise Tieman at University of Florida, Lukas Mueller at Cornell University, <u>Ying Wang</u> at Mississippi State University; Collaborators: Joaquin Canizares at Universidad Politécnica de Valencia, Spain, Sofia Visa at College of Wooster); Wang lab budget: \$492,454. (01/2017 to 04/2022)

Internal Grant:

Mississippi State University College of Arts and Sciences Strategic Research Initiatives (PI: Ying Wang; coPI:

Donna Gordon) Total budget: \$8,564 (Wang lab: \$6,064). (02/2018 to 12/2018)

Travel Grants:

Mississippi State University ACADEX Faculty Travel Award, \$600.00, 2022. Mississippi State University ORED Faculty Travel Award, \$500.00, 2019.

PROFESSIONAL SERVICES

Ad hoc Journal Reviewer (29 Journals in total; 22 Journals since 2017)

Advanced Science, BMC Plant Biology, Cells, Frontiers in Microbiology, Frontiers in Plant Science, Gene, International Journal of Molecular Sciences, Journal of Virology, Molecular Plant-Microbe Interactions, Molecular Plant Pathology, Pathogens, Phytopathology, Phytopathology Research, Plant Biotechnology Journal, Plant Cell, Plant Cell Reports, Plant Journal, Plant Methods, Plant Molecular Biology, Plant Physiology, Plant Science (Elsevier), Plants, PLoS ONE, PLoS Pathogens, RNA Biology, Scientific Reports, Virology, Virus Research, Viruses.

Journal Editor (2)

PLoS Pathogens (Guest Editor), Frontiers in Virology (Review Editor), Viruses (Editorial Board Member)

Book Proposal Reviewer (1)

Elsevier

Grant	2	$\Delta I / I \Delta I$	MAr

8. 2022	Panelist, National Institutes of Health (MG Study Section in June), USA
7. 2022	Ad hoc, National Science Foundation (MCB), USA
6. 2022	Ad hoc, Natural Sciences and Engineering Research Council of Canada (NSERC)
5. 2021	Ad hoc, National Science Foundation (MCB), USA
4. 2020	Ad hoc, CFAES Research competitive grants, The Ohio State University, USA
3. 2019	Ad hoc, CFAES Research competitive grants, The Ohio State University, USA
2. 2019	Ad hoc, National Science Centre, Poland
1. 2017	Panelist, National Science Foundation (GRFP), USA
<u>Service</u>	
2022-Present	College Scholarship Committee, Mississippi State University
2022	Session Chair of VIROID 2022 Conference at Heraklion, Greece
2022	Workshop Convenor of American Society for Virology annual meeting, Madison WI
2021-2022	Chair, Molecular and Cellular Phytopathology Committee, American
	Phytopathological Society
2021, 2022	Faculty Search Committee, Department of Biological Sciences, Mississippi State

University
Vice Chair, Molecular and Cellular Phytopathology Committee, American
Phytopathological Society
Graduate Committee, Department of Biological Sciences, Mississippi State University
Judge for poster presentation at Mississippi IDeA Conference at Jackson Mississippi
Faculty Search Committee, Department of Biological Sciences, Mississippi State
University
Judge for BURP undergraduate poster presentation, Starkville, Mississippi

AWARDS

2019 First Place Mentor Award at Annual Undergraduate Student Research Symposium, Mississippi State University, MS

TEACHING EXPERIENCE

2023 Spring	BIO4433/6433 (Virology), Mississippi State University
2022 Fall	BIO2113 (Plant Biology), Mississippi State University
2022 Spring	BIO4433/6433 (Virology), Mississippi State University
2021 Fall	BIO4433/6433 (Virology), Mississippi State University
2021 Spring	BIO4433/6433 (Virology), Mississippi State University
2021 Spring	Guest lecture, PLP6223C (Viral Pathogens of Plants), Virtual, University of Florida
2021 Spring	Guest lecture, EPP4214/6214 (Diseases of Crops), Mississippi State University
2020 Fall	BIO8990 (Gene Regulation), Mississippi State University
2020 Spring	BIO4433/6433 (Virology), Mississippi State University
2017-2019	BIO2113 (Plant Biology), Mississippi State University
2015, 2016	Guest lecture, Molecular Genetics 5607 (Plant Cell Biology), Ohio State University
2015	Guest lecture, Molecular Virology, Immunology & Medical Genetics 7741, Ohio State University
2013	Lecturer for High School Biology Group, Columbus North International School, Columbus, OH
2013	Guest lecture, Molecular Genetics 3300 (Plant Biology), Ohio State University
2012-2013	UAHS Honors Science Research Mentor for Upper Arlington High School, Columbus OH

GRADUATE STUDENT ADVISORY/THESIS COMMITTEES

Advisor of:

Junfei Ma (Ph.D., Mississippi State University), graduated in December 2022.

Shachinthaka D. Dissanayaka Mudiyanselage (Ph.D., Mississippi State University), graduated in Dec. 2022.

Sameerika D. Dissanayaka Mudiyanselage (Ph.D. student, Mississippi State University), Current

Ramtin Vamenani (Ph.D. student, Mississippi State University), Current

Trained undergraduate students:

- Heather Smith, graduated with a Master's degree from Louisiana State University, Baton Rouge
- Sara Tyrrell, currently in the Graduate School at University of Tokyo, Japan
- Reese Newman, currently in the medical school program at University of Mississippi Medical Center
- Lexie Thomas, admitted to the medical school program at William Carey College of Osteopathic Medicine

PUBLICATIONS

Scientific publications after joining Mississippi State University

<u>Peer-reviewed scientific publications (* and [#] denote undergraduate and graduate authors, respectively)</u>

<u>Research paper</u>

- 15. Deb A, Tow BD, Qing Y, Walker M, Stewart JA, Knollmann BC, Zheng Y, Wang Y, Liu B. Genetic inhibition of mitochondrial permeability transition pore exacerbates ryanodine receptor 2 dysfunction in arrhythmic disease. *Cells* 12:204. (Impact Factor 7.666)
- 14. Dissanayaka Mudiyanselage SD*, Ma J*, Pechan T, Pechanova O, Liu B, Wang Y[†]. A remodeled RNA polymerase II complex catalyzing viroid RNA-templated transcription. 2022. **PLoS Pathogens 18:**e1010850. (†: The corresponding author) (download link) (Impact Factor 7.464)
- 13. Ma J[#], Dissanayaka Mudiyanselage SD[#], Park WJ, Wang M, Takeda R, Liu B, Wang Y[†]. A nuclear import pathway exploited by pathogenic noncoding RNAs. 2022. *Plant Cell* 34:3543-3556. (†: The corresponding author) (Featured in the "Spotlight" of Trends in Microbiology) (download link) (Impact Factor 12.085)
- 12. Qing Y, Zheng Y[†], Mlotshwa S, Smith HN*, Wang X, Zhai X, van der Knaap E, Wang Y[†], Fei Z[†]. Dynamically expressed small RNAs, substantially driven by genomic structural variants, contribute to transcriptomic changes during tomato domestication. 2022. *Plant Journal* 110:1536-1550. (†: Corresponding authors) (Featured in Journal's "Research highlight" and "Cover") (download link) (Impact Factor 7.091)
- 11. Kang S-H, Aknadibossian V, Kharel L*, Dissanayaka Mudiyanselage SD*, Wang Y, Folimonova SV. The intriguing conundrum of a nonconserved multifunctional protein of Citrus tristeza virus that interacts with a viral long non-coding RNA. 2021. *Viruses* 13:2129. (download link) (Impact Factor 5.818)
- Kong L, Feng B, Yan Y, Kim J, Xu L, Rack JGM, Wang Y, Jang JC, Ahel I, Shan L, He P. Noncanonical mono(ADP-ribosyl)ation of zinc finger SZF proteins counteracts ubiquitination for protein homeostasis in plant immunity. 2021. *Molecular Cell* 81:1-14. (*Featured in Journal's "Preview"*) (download link) (Impact Factor 19.328)
- 9. Pereira L, Sapkota M, Alonge M, Zheng Y, Zhang Y, Razifard H, Taitano NK, Schatz M, Fernie A, Wang Y, Fei Z, Caicedo AL, Tieman D, van der Knaap E. 2021. Natural genetic diversity in tomato flavor genes. *Frontiers in Plant Science* 12:642828. (download link) (Impact Factor 6.627)
- Seo H, Wang Y, Park WJ. 2020. Time-resolved observation of the destination of microinjected potato spindle tuber viroid (PSTVd) in the abaxial leaf epidermal cells of *Nicotiana benthamiana*, *Microorganisms* 8:2044. (download link) (Impact Factor 4.926)

7. Dissanayaka Mudiyanselage SD[#], Wang Y[†]. 2020. Evidence supporting that RNA polymerase II catalyzes de novo transcription using potato spindle tuber viroid circular RNA templates. *Viruses* 12:371. (†: The corresponding author) (download link) (Impact Factor 5.818)

- 6. Jiang J, Ma J[#], Liu B[†], Wang Y[†]. 2019. Combining a simple method for DNA/RNA/Protein co-purification and Arabidopsis protoplast assay to facilitate viroid research. *Viruses* 11:324. (†: Corresponding authors) (download link) (Impact Factor 5.818)
- 5. Jiang J, Smith HN*, Ren D, Dissanayaka Mudiyanselage SD*, Dawe AL, Wang L, Wang Y[†]. 2018. Potato spindle tuber viroid modulates its replication through a direct interaction with a splicing regulator. *Journal of Virology* 92:e01004-18. (†: The corresponding author) (Featured in Journal's "Spotlight") (download link) (Impact Factor 6.549)
- 4. Takeda R[†], Zirbel CL, Leontis NB, Wang Y[†], Ding B. 2018. Allelic RNA motifs in regulating systemic trafficking of potato spindle tuber viroid. *Viruses* 10:160. (†: Corresponding authors) (download link) (Impact Factor 5.818)
- 3. Wang Y[†], Zirbel CL[†], Leontis NB[†], Ding B. 2018. RNA three-dimensional structural motifs as a critical constraint of viroid RNA evolution. *PLOS Pathogens* 14:e1006801. (†: Corresponding authors; Peer-reviewed biology theory paper) (download link) (Impact Factor 7.464)
- 2. Zheng Y[§], Ding B, Fei Z[†], Wang Y^{§,†}. 2017. Comprehensive transcriptome analyses reveal tomato plant responses to tobacco rattle virus-based gene silencing vectors. **Scientific Reports 7:**9771 ([§]: Equal contribution; [†]: Corresponding authors) (download link) (Impact Factor 4.996)
- 1. Zheng Y[§], Wang Y^{§,†}, Ding B, Fei Z[†]. 2017. Comprehensive transcriptome analyses reveal that potato spindle tuber viroid triggers genome-wide changes in alternative splicing, inducible trans-acting activity of phased secondary small interfering RNAs and immune responses. *Journal of Virology* 91:e00247-17 ([§]: Equal contribution; [†]: Corresponding authors) (download link) (Impact Factor 6.549)

Invited Review

- 6. Ma J[#], Dissanayaka Mudiyanselage SD[#], Wang Y[†]. Emerging value of the viroid model in molecular biology and beyond. 2022. *Virus Research* 313:198730. (†: The corresponding author) (download link) (Impact Factor 6.286)
- 5. Ma J[#], Wang Y[†]. Studies on viroid shed light on the role of RNA 3-dimensional structural motifs in RNA trafficking in plants. 2022. *Frontiers in Plant Science* 13:836267. (†: The corresponding author) (download link) (Impact Factor 6.627)
- 4. Wang Y[†]. 2021. Current view and perspectives in viroid replication. *Current Opinion in Virology* 47:32-37. (†: The corresponding author) (download link) (Impact Factor 7.121)
- 3. Wang M[†], Gao S, Zeng W, Yang Y, Ma J[#], Wang Y[†]. 2020. Plant virology delivers diverse toolsets for biotechnology, *Viruses* 12:1338. (†: Corresponding authors) (download link) (Impact Factor 5.818)
- 2. Wang Y[†], Liu B[†]. 2020. Circular RNA in diseased heart. *Cells* 9:1240. (†: Corresponding authors) (download link) (Impact Factor 7.666)

1. Dissanayaka Mudiyanselage SD[#], Qu J, Tian N*, Jiang J, Wang Y[†]. 2018. Potato spindle tuber viroid RNA-templated transcription: factors and regulation. *Viruses* 10:503. (†: The corresponding author) (download link) (Impact Factor 5.818)

Editor-reviewed scientific book chapters

- 3. Jakše J, Wang Y, Matoušek J. 2021. Transcriptomic analyses provide insights into plant-viroid interactions. *Fundamentals of Viroid Biology* (Elsevier). *In Press*. Editor accepted revision on March 5, 2022.
- 2. Dissanayaka Mudiyanselage SD, Wang Y[†]. 2021. Fluorescein-based electrophoretic mobility shift assay. *Methods in Molecular Biology* 2316:133-140. (†: The corresponding author) DOI: 10.1007/978-1-0716-1464-8 12.
- 1. Smith HN*, Ma J, Wang Y[†]. 2021. Analysis on RNA motif-based RNA trafficking in plants. *Methods in Molecular Biology* 2316:29-37. (†: The corresponding author) DOI: 10.1007/978-1-0716-1464-8_3.

Peer-reviewed scientific publications before joining Mississippi State University

- 9. Wang Y^{§,†}, Qu J[§], Ji S, Wallace AJ, Wu J, Li Y, Gopalan V, Ding B. 2016. A Land Plant-specific Transcription Factor Directly Enhances Transcription of a Pathogenic Noncoding RNA Template by DNA-dependent RNA Polymerase II. *Plant Cell* 28:1094-1107. (§: Equal contribution; †: The corresponding author) (Featured in Journal's "In Brief") (download link) (Impact Factor 12.085)
- 8. Zheng Y[§], Wang Y[§], Wu J, Ding B, Fei Z. 2015. A dynamic evolutionary and functional landscape of plant phased small interfering RNAs. *BMC Biology* 13:32. (§: Equal contribution) (download link) (Impact Factor 7.364)
- 7. Liu N, Wu S, Van Houten J, Wang Y, Ding B, Fei Z, Clarke TH, Reed JW, van der Knaap E. 2014. Down-regulation of AUXIN RESPONSE FACTORS 6 and 8 by microRNA167 leads to floral development defects and female sterility in tomato. *Journal of Experimental Botany* 65:2507-2520. (download link) (Impact Factor 7.298)
- 6. Wang Y, Itaya A, Zhong X, Wu Y, Zhang J, van der Knaap E, Olmstead R, Qi Y, Ding B. 2011. Function and evolution of a microRNA that regulates a Ca²⁺-ATPase and triggers the formation of phased small interfering RNAs in tomato reproductive growth. *Plant Cell* 23:3185-3203. (*Highlighted in Journal's "In Brief"*) (download link) (Impact Factor 12.085)
- 5. Wang Y, Ding B. 2010. Viroids: small probes for exploring the vast universe of RNA trafficking in plants. *Journal of Integrative Plant Biology* 52:28-39. (download link) (Impact Factor 9.106)
- 4. Ding B, Wang Y. 2009. Viroids, uniquely simple and tractable models to elucidate regulation of cell-to-cell trafficking of RNA. *DNA and Cell Biology* 28:51-56. (download link) (Impact Factor 3.55)
- 3. Itaya A, Zhong X, Bundschuh R, Qi Y, Wang Y, Takeda R, Harris AR, Molina C, Nelson RS, Ding B. 2007. A structured viroid RNA serves as a substrate for dicer-like cleavage to produce biologically active small RNAs but is resistant to RNA-induced silencing complex-mediated degradation. *Journal of Virology* 81:2980-2994. (Featured by Faculty1000 Biology as "Must Read" in 2007) (download link) (Impact Factor 6.549)

2. Wang Y, Zhong X, Itaya A, Ding B. 2007. Evidence for the existence of the loop E motif of Potato spindle tuber viroid in vivo. *Journal of Virology* 81:2074-2077. (download link) (Impact Factor 6.549)

1.Tang XC, He YQ, Wang Y, Sun MX. 2006. The role of arabinogalactan proteins binding to Yariv reagents in the initiation, cell developmental fate, and maintenance of microspore embryogenesis in Brassica napus L. cv. Topas. *Journal of Experimental Botany* 57:2639-2650. (download link) (Impact Factor 7.298)

INVITED/SELECTED TALKS

Research talks after joining Mississippi State University

<u>Invited seminars</u> (Trainees and collaborators mentioned in the Acknowledgments during seminar)

- 9. "A foreign RNA's journey in cells" at Department of Plant and Soil Sciences, University of Delaware, Virtual Seminar, February 2022
- 8. "A foreign RNA's journey in cells" at Department of Biological Sciences, Mississippi State University, January 2022
- 7. "Potato spindle tuber viroid, a small probe for understanding plant RNA-based machinery" at Department of Plant Pathology, Ohio State University, Virtual Seminar, October 2021
- 6. "Potato spindle tuber viroid, a small probe for understanding plant RNA-based machinery" at Department of Botany and Plant Pathology, Purdue University, Virtual Seminar, March 2021
- "Potato spindle tuber viroid, a model for studying RNA-templated transcription catalyzed by DNAdependent RNA polymerase II and beyond" at Department of Biology, Louisiana State University, Virtual Seminar, October 2020
- 4. "Towards the understanding of the simplest yet a sophisticated organism, Potato spindle tuber viroid" at Department of Biology, University of Mississippi, Oxford MS, February 2020
- 3. "Towards the understanding of the simplest yet a sophisticated organism, Potato spindle tuber viroid" at Fujian Agriculture and Forestry University, Fuzhou China, June 2019
- "Towards the understanding of the simplest yet a sophisticated species, Potato spindle tuber viroid" at Mississippi State University, Department of Biochemistry, Molecular Biology, Entomology, & Plant Pathology, College of AG & Life Sciences, Starkville, Mississippi, March 2019
- "Solanaceae as a model to explore noncoding RNAs in plants: From evolution dynamics to agricultural importance" at Mississippi State University, Department of Biochemistry, Molecular Biology, Entomology, & Plant Pathology, College of AG & Life Sciences, Starkville, Mississippi, September 2017

<u>Conference presentations</u> (Trainees and collaborators mentioned in the Acknowledgments during talk) Selected talk: selected after abstract submission; Invited talk: invited before abstract submission

- 10. "A viroid RNA's journey in cells" Invited "State-of-the-Art Talk", scheduled to be at Ameriacn Society for Virology in June 2023
- 9. "A remodeled RNA polymerase II catalyzing viroid RNA-templated transcription", selected talk (Session

- Chair) at Viroid 2022 Conference, Heraklion, Greece, September 2022
- 8. "A nuclear import pathway exploited by viroid RNAs", invited talk at Plant RNA Structure Symposium (hosted by John Innes Centre and Frontiers Journal), Virtual Symposium, September 2021
- 7. "Applying multiple Omic Analyses to Understand Plant-Viroid Interactions", invited talk at Mississippi IDeA Conference for Biomedical Research, Jackson MS, August 2019
- 6. "RNA 3-dimensional structural motifs as a critical constraint of viroid RNA evolution", selected talk at American Society for Virology Annual Meeting, Minneapolis MN, July 2019
- 5. "Insights into RNA-templated transcription by DNA-dependent RNA polymerase II in plants", selected talk at 30th International Conference on Arabidopsis Research, Wuhan China, June 2019
- 4. "Potato spindle tuber viroid modulates its replication through a direct interaction with a splicing regulator", selected talk at American Society for Virology Annual Meeting, Washington D.C., July 2018
- 3. "How does potato spindle tuber viroid interact with the host machinery for replication? -Some recent insights into the mechanism", selected talk at Viroid-2018 International Conference, Valencia, Spain, July 2018
- "Applying multiple transcriptome analyses to understand plant-viroid interactions", invited talk at 15th
 Annual conference of the MidSouth Computational Biology and Bioinformatics Society, Starkville,
 Mississippi, March 2018
- "Comprehensive genome-wide analyses revealed molecular dynamics underlying plant responses to a pathogenic noncoding RNA", selected talk at American Society for Virology Annual Meeting, Madison, Wisconsin, June 2017
- <u>Supervised trainee presentation at meetings</u> (* undergraduate student/ * graduate student; only listing the presenter among all authors on abstracts)
- 11. Junfei Ma[#], "A nuclear import pathway exploited by viroid RNAs", selected talk at American Society for Virology (ASV) Annual meeting, Madison, WI, July, 2022.
- 10. Shachinthaka D. Dissanayaka Mudiyanselage[#], "*A remodeled RNA polymerase II catalyzing viroid RNA-templated transcription*", selected talk at ASV Annual meeting, Madison, WI, July, 2022.
- 9. Junfei Ma[#], "A nuclear import pathway exploited by viroid RNAs", poster presentation at American Society for Plant Biologists (ASPB) Annual meeting, Portland, OR, July, 2022.
- 8. Sara Tyrrell*, "Functional Analysis on a Splicing Variant of Transcription Factor IIIA", poster presentation at Biology Undergraduate Research Program annual meeting, Starkville, MS, April, 2019.
- 7. Shachinthaka D. Dissanayaka Mudiyanselage[#], "Functional Domains in Transcription Factor IIIA-7ZF for Potato Spindle Tuber Viroid RNA-Templated Transcription by Pol II", selected talk at ASV Annual meeting, Minneapolis, MN, July, 2019.
- 6. Junfei Ma[#], "Species-specific DCL2 orthologs in tomato responding to potato spindle tuber viroid infection", poster presentation at ASV Annual meeting, Minneapolis, MN, July, 2019.
- 5. Jian Jiang, "A simple method to co-purify genomic DNA, RNA, and proteins for functional studies",

- poster presentation at ASV Annual meeting, Minneapolis, MN, July, 2019.
- 4. Junfei Ma[#], "Species-specific DCL2 orthologs in tomato responding to potato spindle tuber viroid infection", poster presentation at MAS 3rd Summer Science Symposium, Starkville, MS, June, 2019.
- 3. Jian Jiang, selected talk and poster presentation at ASPB annual meeting, Montreal, Canada, July, 2018.
- 2. Shachinthaka D. Dissanayake Mudiyanselage[#], "A pathogenic circular noncoding RNA interacts with ribosomal protein L5 to modulate the alternative splicing of transcription factor IIIA for enhanced RNA replication", poster presentation at Mississippi INBRE symposium during annual meeting of Mississippi Academy of Sciences, Hattiesburg, MS, February, 2018.
- Heather Smith*, "Species-Specific DICER-Like Proteins Contribute to Plant Defense Against a
 Pathogenic Noncoding RNA", selected talk at the Millsaps-HHMI Undergraduate Symposium during the
 annual meeting of Mississippi Academy of Sciences (honorably mentioned), Hattiesburg, MS, February,
 2018.

Research talks before joining Mississippi State University (co-authors acknowledged during talk)

- 10. "Novel insights into the infection of a pathogenic non-coding RNA in plants: some recent progress on viroid research", seminar at Wuhan University, Department of Biological Sciences, Wuhan, China, December 2016
- "Solanaceae as a model to explore noncoding RNAs in plants: From evolution dynamics to agricultural importance", seminar at The Chinese Academy of Sciences, Institute of Botany, Beijing, China, November 2016
- 8. "Plant-Viroid interactions: some recent progress", seminar at Ohio State University, Department of Plant Pathology, Columbus, OH, October 2016
- "A land plant-specific transcription factor directly enhances DNA-dependent RNA polymerase II
 transcription on viroid RNA", selected talk at The XVII International Society of Molecular Plant-Microbe
 Interactions Conference, Portland, OR, June 2016
- 6. "New insights into the evolution and function of non-coding RNAs in plants: Solanaceae as a model", seminar at Biological Sciences, Mississippi State University, Starkville, MS, May 2016
- 5. "A conserved eukaryotic transcription factor is essential for the replication of viroid RNA genome", selected talk at The XVIth International Congress of Virology Conference, Montreal, Canada, July 2014
- 4. "New insights into the evolution and function of young miRNAs: Solanaceae as a model", invited seminar at University of Pennsylvania, Plant Biology Community, Philadelphia, PA, April 2013
- 3. "Evolution of a novel microRNA regulating a Ca²⁺ ATPase transporter", invited seminar at Wuhan University, College of Life Sciences, Wuhan, China, December 2009
- "Function and evolution of a non-conserved microRNA- Science from courtyard", Kowlett seminar for HCS and Plant Pathology Department, Ohio State University, Columbus, OH, November 2009
- "Host factor-viroid interactions in systemic trafficking", selected talk at American Society for Virology Annual Meeting, Vancouver, Canada, July 2009