# CURRICULUM VITAE

**Venugopal Mendu, PhD** *Texas A&M University-Kingsville*
***Professor and Department Chair*** *venugopal.mendu@tamuk.edu*
*Agriculture, Agribusiness and Environmental Sciences* *venugopalmendu@gmail.com*

## Education

Ph.D. (2008) Plant Physiology, Biochemistry and Molecular Biology Program.
Dep. of Plant & Soil Sciences, University of Kentucky, USA.
M.S. (2000) Genetics & Plant Breeding, A.N.G.R. Agricultural University, India.
B.S. (1998) Major: Agriculture, A.N.G.R. Agricultural University, India.

## Professional appointments

2025-Present ***Professor and Department Chair (Tenured)***
Department of Agriculture, Agribusiness and Environmental Sciences,
Texas A&M University-Kingsville, Kingsville, TX.
https://www.tamuk.edu/agriculture/departments/aaes/faculty-staff-aaes/Mendu.html

2024-2025 ***Associate Professor and Department Chair (Tenured)***
Department of Agriculture, Agribusiness and Environmental Sciences,
Texas A&M University-Kingsville, Kingsville, TX.

2022-2024 ***Winifred Asbjornson Plant Sci. Endowed Chair*, *Associate Professor (Tenured)***
Department of Plant Sciences & Plant Pathology, Montana State University, Bozeman, MT.

2022-present ***Adjunct graduate faculty***
Dep. of Plant & Soil Science, Texas Tech University, Lubbock, TX.

2019-2021 ***Associate Professor of Cell Wall Biology (Tenured)***
Fiber & Biopolymer Research Institute (FBRI)**,** Dep. of Plant & Soil Science,
Texas Tech University, Lubbock, TX.

2013-2019 ***Assistant Professor of Cell Wall Biology***
Fiber & Biopolymer Research Institute (FBRI)**,** Dep. of Plant & Soil Science,
Texas Tech University, Lubbock, TX.

2012-2013 **Postdoc,** Inst. of Biology, École Normale Supérieure, Paris, France.
2008-2012 **Postdoc,** Dep. of Horticulture & Plant Pathology, University of Kentucky, USA.
2003-2008 **Graduate Research Assistant,** Plant & Soil Sciences, University of Kentucky.

## Awards

*Received:*

1. *"**Integrated Plant and Soil Sciences Alumnus Early Career**"* award, University of Kentucky, Lexington, 2022.
2. *"**College of Agricultural Sciences & Natural Resources International impact**"* award, Texas Tech University, 2019.
3. "***TTU Chancellor's Council Distinguished Research***" award, Texas Tech University, 2018.
4. *"**College of Agricultural Sciences & Natural Resources Research**"* award, Texas Tech University, 2017.
5. *"**TTU Alumni Association New Faculty Award**"*, Texas Tech University, April 2017

*Nominated:*

1. Peanut Research and Education Award, 2025
2. TAMEST Edith and Peter O'Donnell Award (https://tamest.org/odonnell-awards/), 2020.
3. Nancy J. Bell Graduate Faculty Excellence In Mentoring Award, 2019
4. President's Excellence in Teaching Award, 2017.
5. President's Excellence in Diversity and Equity award, 2016.

**Honors/Academic accomplishments**

1. Awarded "Jeffrey fellowship" for tobacco research (2006-07), University of Kentucky.
2. Kentucky Graduate scholarship (KGS) 2003-2008, University of Kentucky.
3. Scholarship (1998-2000) during Post Graduate study from Govt. of A.P, India, 1998-2001.

**Awards/Academic Accomplishments of *my graduate students***

1. **Julia Jellema**, Outstanding Graduate Student, Montana State University, 2024.
2. **Haydee Laza** Associate professor, in the department of Plant and Soil Science at TTU (https://www.depts.ttu.edu/research/cotton/bios/haydee-laza.php).
3. **Vimal Kumar Balasubramanian** is a staff scientist at Pacific Northwest Laboratory (https://www.pnnl.gov/people/vimal-kumar-balasubramanian)
4. **Krishan Mohan Rai is a** Plant Genetics Director, CoverCress Inc.
5. **Theophilus Tengey** is research scientist (Genetics and Plant breeding) at CSIR, Ghana (https://www.linkedin.com/in/theophilus-kwabla-tengey-8293b829/?originalSubdomain=gh)
6. **Nam Anh Bui Phu** is a researcher/lecturer at a University in Vietnam (https://iasvn.org/menutop/nhansu/Bui-Phu-Nam-Anh-176.html)
7. **Vimal Kumar Balasubramanian** (Ph.D.) received competitive *"Outstanding Dissertation Award"* for 2019 in the category of Biology/Life Sciences.
8. **Vimal Kumar Balasubramanian** (Ph.D.) received competitive *"George Tereshkovich Plant and Soil Science Outstanding Graduate (Ph.D.) student award, 2019.*
9. **Vimal Kumar Balasubramanian** (Ph.D.) received competitive *"Doctoral dissertation completion fellowship (2018)"*.
10. **Cassie M. Welker** (MS) received competitive *George Tereshkovich Plant and Soil Science Outstanding Graduate (Master) student award, 2015*.

**Research areas:** Plant developmental biology, biotic stress (fungal, bacterial, viral and insects), abiotic stress (salt, cold, heat, drought, and heavy metal).
**Crops:** Arabidopsis, cotton, soybean, sorghum, peanut, wheat, barley, white teak, lentil, poplar, citrus and corn.
**Technologies:** Omics (genomics, transcriptomics, proteomics, metabolomics), genome editing, transgenic, molecular breeding, functional genomics, biochemistry, phenomics, and molecular biology.

**Publications (59):**
**Published research articles: 50; Published book chapters: 9; Book Editing (1)**
*Corresponding author; ΦUndergraduate student; #Graduate student; ##Graduate student of other faculty; ΨPostdoc; δBorlaug Fellow/visiting student,ΩDomestic collaborator, ɣ International collaborator and χMcNair Scholar student.

***Citations*:** Citations: 2482; i10 index: 40; h-index: 26.
(https://scholar.google.com/citations?user=1ZKz64cAAAAJ&hl=en).

**Published research articles: 52**

1. Ravet, A., Zervudacki, Jerome, Singla-Rastogi, M., Charvin, M., Thiebeauld, O., Perez-Quintero, A.L., Fortunato, A.E., Candat, A, **Mendu, V.** and Navarro, L. (2025) *Extracellular plant sRNAs direct gene silencing in a pathogenic bacterium*. ***Nature communications*. 16**, 3533 (2025). *https://doi.org/10.1038/s41467-025-57908-1*.
2. Naik, Y.D., Bahuguna, R.N., Garcia-Caparros, P., Zwart, R.S., Reddy, M.S.S., Mir, R.R., Jha, U.C., Fakrudin, B., Manish K. Pandey, M.K., Chellabatula, D., Sharma, V.K., Reddy, U.K., Kumar, C.V.S, **Mendu, V**., Prasad, P.V.V., Punnuri, P., Varshney, R.K., and Thudi, M. (2024) *Exploring the multifaceted dynamics of flowering time regulation in field crops: Insight and interventions approaches*. ***Plant Genome***. 2025; e70017, *https://doi.org/10.1002/tpg2.70017*.
3. Aminou, M.M., Falalou, H., Harou, A., and **Mendu, V.** (2024) Aflatoxin contamination association with seed coat biochemical markers in peanut under intermittent drought. ***Journal of Fungi**, 10(12), 850; https://doi.org/10.3390/jof10120850*.
4. Commey, L.#, Burow, M, Mechref, Y., and **Mendu, V.** (2024) *Identification and characterization of peanut seed coat secondary metabolites inhibiting A. flavus growth and reducing aflatoxin contamination.* ***Journal of Agriculture and Food Chemistry, DOI:*** *https://doi.org/10.1021/acs.jafc.4c05517.*
5. Laza, H.#, Bhattharai, B., **Mendu, V.**, Burow, M., Emendack, Y., Sanchez, J., Gupta, A., Abdelrahman, M., Tran, L. P., Tissue., D and Payton., P (2024) *Peanut Leaf Transcriptomic Dynamics Reveals Insights into the Acclimation Response to Elevated Carbon Dioxide under Semiarid Conditions*. ***Frontiers in Plant Science, Functional and Applied Plant Genomics.*** V.*15, 1407574, doi: 10.3389/fpls.2024.1407574*.
6. Hale, G.χ#, Yuan, N.Ψ, Mendu, L., Ritchie, G.Ω, **Mendu, V.*** (2024) Canopeo app as image-based phenotyping tool in controlled environment utilizing *Arabidopsis* mutants. ***PLoS ONE** 19(3): e0300667. https://doi.org/10.1371/journal.pone.0300667*.
7. Chen, G., Liu, Z., Li, S., Liu, L., Lu, L., Wang, Z., **Mendu, V**., Li, F., and Yang, Z.ɣ (2023). *Characterization of chromatin accessibility and gene expression reveal the key genes involved in cotton fiber elongation.* ***Physiologia Plantarum,*** e13972, *DOI: 10.1111/ppl.13972*.
8. Bathini, A#, Mendu, L., Singh, N.P.#, Cook, J.Ω, Weaver, D.Ω, Sherman, J.Ω, Mondal, S.Ω, Hager, M.##, and **Mendu, V.*** (2023). *A "solid" solution for wheat stem sawfly (Hymenoptera: Cephidae) resistance: Genetics, breeding, and development of solid stem wheat*. ***Crop Science***, 1–15. *https://doi.org/10.1002/csc2.20998*.
9. Yuan, N.Ψ, Mendu, L., Kaushik G.Ψ, Witte., C.S.,Φ, Frugoli, J.Ω, **Mendu V.*** (2023) *FKF1 interacts with CHUP1 and regulates chloroplast movement in Arabidopsis*. ***Plants,*** *12*(3), 542; *https://doi.org/10.3390/plants12030542*.

10. Liu, L., Chen, G., Li, S., Gu, Y., Lu, L., **Mendu, V.,** Liu, Z., and Yang, Z.[γ] (2022). *A brassinosteroid transcriptional regulatory network involved in regulation of fiber elongation in Gossypium hirsutum.* ***Plant physiology,*** kiac590, *https://doi.org/10.1093/plphys/kiac590.*
11. Gangurde, S.S., Xavier, A., Naik, Y. D., Jha, U.C., Rangari, S. K., Kumar, R., Chennale, S., Zwart, R., Mir, R.R., Sharma, V. K., Sudini, H.K., Pandey, M.K., **Mendu, V.,** Reddy, U.[Ω], Dutta, B., Guo, B., Zhao, C. and Thudi, M.[γ] (2022) *Two decades of association mapping: Insights on disease resistance in major crops.* ***Frontiers in plant science,*** *doi: 10.3389/fpls.2022.1064059.*
12. Mendu, L.[δ], Jalathge, G.[δ#], Dhillon, K.K.[#], Singh, N.P.[#], Balasubramanian, V. K.[#], Fewou, R.[γ], Gitz, D.C.[Ω], Xin, Z.[Ω], and **Mendu, V.** (2022)**,** *Mutation in the Endo-β-1,4-Glucanase (KORRIGAN) is responsible for thick leaf phenotype in sorghum*. ***Plants*** *(Special Issue: Biotechnological Advances in Biomass and Bioenergy)*, *11*(24), 3531; *https://doi.org/10.3390/plants11243531*.
13. Mendu, L., Ulloa, M.[Ω], Paxton, P.[Ω], Monclova C.S.[Ω], Jennifer, C.[##], and **Mendu, V**.* (2022) *Lignin and cellulose content in root of different cultivars associated with different levels of Fusarium wilt race 4 (FOV4) resistance-response*. ***Journal of Agri. and Food Research***. 100420, *https://doi.org/10.1016/j.jafr.2022.100420*.
14. Mendu, L., Cobos, C.[#], Tengey, T.T.[#], Commey, L.[#], Balasubramanian, V. K.[#], Williams, L. D.[#], Dhillon, K. K.[#], Sharma, D.[#], Pandey, M.K., Falalou, H.[γ], Varshney, R.K.[γ], Sudini, H.K.[γ], Burow, M.D.[Ω], and **Mendu, V**.* (2022) *Seed coat mediated resistance against Aspergillus flavus infection in peanut.* ***Plant gene****,* 32, 100381, *doi.org/10.1016/j.plgene.2022.100381*.
15. Shumayla., **Mendu, V**., Singh, K. and Upadhyay, S.K.[γ] (2022) Insight into the Roles of Proline-Rich Extensin-like Receptor Protein Kinases of Bread Wheat (*Triticum aestivum* L.). ***Life****,* **2022**, *12*(7), 941; *https://doi.org/10.3390/life12070941*.
16. Hill, N.[##], Meyers, C., Li, Nan, Doerfert, D. and **Mendu, V.** (2022) How does the public discuss gene-editing in agriculture? An analysis of Twitter content. ***Advancements in Agricultural Development***, *3*(2), 31–47. *https://doi.org/10.37433/aad.v3i2.187*.
17. Hill, N.[##], Meyers, C., Li, Nan, Doerfert, D. and **Mendu, V.** (2022) *Persuasive Effects of Metaphors Regarding Gene-Editing in Agriculture*. ***Journal of Applied Communications***, Vol. 106: Iss. 1. *https://doi.org/10.4148/1051-0834.2416*.
18. Commey, L.[#], Tengey, T.K.[#], Cobos, C.J.[#], Dampanaboina, L., Dhillon, K.K.[#], Pandey, M.K.[γ], Sudini, H.K.[γ], Falalou, H.[γ], Varshney, R.K.[γ], Burow, M.D., and **Mendu, V.**[*] (2021) *Peanut seed coat acts as a physical and biochemical barrier against Aspergillus flavus infection.* ***Journal of Fungi***, 7, 1000. *https://doi.org/10.3390/ jof7121000.*
19. Yaya-Lancheros, M. L.[δ], Rai, K.M.[Ψ], Balasubramanian, V.K.[#], Dampanaboina, L. **Mendu V.**[*] and Teran, W.[γ] (2021) *De novo transcriptome analysis of white teak (Gmelina arborea Roxb) wood reveals critical genes involved in xylem development and secondary metabolism*. ***BMC genomics***, 22, 494, *https://doi.org/10.1186/s12864-021-07777-x*.
20. Dampanaboina, L., Yuan, N.[Ψ], **Mendu V.**[*] (2021) *Estimation of plant biomass lignin content using TGA method*. ***Journal of Visualized Experiments (JoVE)***, e62055, *doi:10.3791/62055*.
21. Balasubramanian, V. K.[#], Dampanaboina, L., Cobos, C.[#], Yuan, N.[Ψ], Xin, Z[Ω], **Mendu V.**[*] (2021) *Induced secretion system mutant alters rhizosphere microbiome composition in Sorghum bicolor (L.) Moench.* ***Planta*** 253, 33 (2021). *https://doi.org/10.1007/s00425-021-03569-5*.

22. Dampanaboina, L., Yuan, N.[Ψ], **Mendu V.**[*] (2021) *Estimation crystalline cellulose content using Updegraff method*. ***Journal of Visualized Experiments (JoVE)***, e62031, *doi:10.3791/62031*.

23. Thu, S.W.[#], Rai, K.M.[Ψ], Sandhu, D[Ω], Rajangam, A.[Ω], Balasubramanian, V.K.[#], Palmer, R. G.[Ω], and **Mendu, V.**[*] (2019) *Mutation in a PHD-Finger Protein MS4 causes male sterility in soybean.* ***BMC Plant biology***, *19:378*, *https://doi.org/10.1186/s12870-019-1979-4*.
24. Yuan, N.[Ψ], Balasubramanian, V.K.[#], Chopra, R.[##], and **Mendu, V.*** (2019) *The photoperiodic flowering time regulator FKF1 negatively regulates cellulose biosynthesis.* ***Plant Physiology,*** *Vol. 180, pp. 2240-2253, DOI: https://doi.org/10.1104/pp.19.00013*.
25. Pandey, M. K., Kumar, R., Pandey, A. K., Soni, P., Gangurde, S. S., Sudini, H. K., Fountain, J., Chen, X., Jiang, H., **Mendu, V.,** Guo, B., Liao, B., Zhuang, W., Wang, X., Liang, X., Varshney R. K.[γ], (2019) *Mitigating aflatoxin contamination in groundnut through combining genetic resistance and post-harvest management practices.* ***Toxins,*** *2019, 11, 315; doi:10.3390/toxins11060315*.
26. Yuan, N.[Ψ], Rai, K.M.[Ψ], Balasubramanian, V.K.[#], Upadhyay, S.K.[γ], Luo, H.[Ω], **Mendu, V*.** (2018) *Genome-wide identification and characterization of LRR-RLKs reveal functional conservation of the SIF subfamily in Cotton (Gossypium hirsutum)*. ***BMC plant biology, 18:185,*** *https://doi.org/10.1186/s12870-018-1395-1*.
27. Yu, D., Qanmber, G., Lu, L., Wang, L., Li, J., Yang, Z., Liu, Z., Li, Y., Chen, Q., **Mendu, V.,** Li, F., Yang, Z.[γ], (2018) *Genome-wide analysis of cotton GH3 subfamily II revealed their functional divergence in fiber development, hormone response and plant architecture*. ***BMC genomics,*** *18:350*, *https://doi.org/10.1186/s12870-018-1545-5*.
28. Witt, T.[##], Ulloa, M.[Ω], Pelletier, M.[Ω], **Mendu, V.,** Ritchie, G.[Ω] (2018) *Irrigation's effect on the fiber quality of Ethyl Methane Sulfonate (EMS) treated Upland cotton (Gossypium hirsutum L.)*. ***Journal of cotton research,*** *1:17, https://doi.org/10.1186/s42397-018-0016-8*.
29. Witt, T.[##], Ulloa, M.[Ω], Pelletier, M.[Ω], **Mendu, V.,** Ritchie, G.[Ω] (2018) *Exploring Ethyl Methane Sulfonate (EMS) treated cotton (Gossypium hirsutum L.) to improve drought tolerance*. ***Euphytica,*** *214:123, https://doi.org/10.1007/s10681-018-2206-3*.
30. Sandhu, D.[Ω], Coleman, Z., Atkinson, T., Rai, K.M.[Ψ], and **Mendu, V** (2018). *Genetics and physiology of the nuclearly inherited yellow foliar mutants in soybean*. ***Frontiers in plant science****, 9,471*. *https://doi.org/10.3389/fpls.2018.00471*.
31. Yuan, N.[Ψ], Yuan, S., Li, Z., Zhou, M., Wu, P., Hu, Q., Wang, L., **Mendu, V.**, and Luo, H.[Ω], (2018) *SIF2, a novel Arabidopsis leucine-rich repeat kinase regulates plant pathogen basal defense*. ***Plant Physiology***, *176, 3062–3080, https://doi.org/10.1104/pp.17.01266*.
32. Disasa, T.[δγ], Feyissa, T., Admassu, B., Fetene, M. and **Mendu, V.,** (2018) *Mapping of QTLs Associated with °Brix and Biomass-related Traits in Sorghum using SSR Marker*. ***Sugar Tech****, 1-11*, *https://doi.org/10.1007/s12355-018-0590-6*.
33. Disasa, T.[δγ], Feyissa, T., Admassu, B., Devillers, S., and **Mendu, V.,** (2017) *Screening, compiling and validation of informative microsatellite sets for marker-assisted breeding of key Ethiopian sorghum cultivars*. ***Australian Journal of crop science,*** *11(05): 557-566, DOI: 10.21475/ajcs.17.11.05. p373*.
34. Balasubramanian, V.K.[#], Rai, K.M.[Ψ], Thu, S.W.[#], Hii, M.M.[δγ], and **Mendu, V.*** (2016) *Genome-wide identification of multifunctional laccase gene family in cotton (Gossypium spp.); expression and biochemical analysis during fiber development*. ***Nature Scientific reports,*** *6:34309/ DOI: 10.1038/srep34309*.

35. Shumayla., Sharma, S., Kumar, R., **Mendu, V**. Singh, K. and Upadhyay, S.K.[γ] (2016) *Genomic dissection and expression profiling revealed functional divergence in TaLRRKs*. ***Frontiers in Plant Science,*** *7:1374. https://doi.org/10.3389/fpls.2016.01374.*
36. Rai, K.M.[Ψ], Thu, S.W.[#], Balasubramanian, V.K.[#], Cobos, C.[#], Disasa, T.[δ γ] and **Mendu, V.***. (2016) *Identification and Expression Analysis of Cell Wall Related Genes in Sorghum bicolor (L.) Moench, a Food, Fodder and Biofuel Crop*. ***Frontiers in Plant Science,*** *7:1287. https://doi.org/10.3389/fpls.2016.01287.*
37. Upadhyay, S.K.[γ], Singh, H., Dixit, S., **Mendu, V.,** Verma, P.C. (2016) Molecular characterization of vitellogenin and vitellogenin receptor of *Bemisia tabaci*. ***PLOS ONE,*** 11(5): e0155306, *https://doi.org/10.1371/journal.pone.0155306.*
38. Rai, K. M.[Ψ], Balasubramanian, V.K.[#], Welker, C.M.[#Φ], Pang, M.[Ψ], Hii, M.M.[δγ], and **Mendu, V.*** (2015) Comprehensive analysis and web resource devolvement on cell wall degrading enzymes from phyto-parasitic nematodes. ***BMC Plant Biology****, 15:187, https://doi.org/10.1186/s12870-015-0576-4.*
39. Welker, C.M.[#Φ,] Balasubramanian, V.K.[#], Petti, C.[γ], Rai, K.M.[Ψ], DeBolt, S[Ω]. and **Mendu, V.*** (2015). Engineering plant biomass lignin content and composition for biofuels and bioproducts. ***Energies,*** *8, 7654-7676; https://doi.org/10.3390/en8087654.*
40. **Mendu, V.**, Shearin, T., Campbell, E.J., Stork, J., Jae, J., Crocker, M., Huber, G., DeBolt, S. (2012) *Global bioenergy potential from high-lignin agricultural residue*. ***PNAS,*** *109 (10): 4014-4019. https://doi.org/10.1073/pnas.1112757109.*
41. Lin, J-Y., **Mendu, V.**, Pogany, J., Qin, J., and Nagy, P.D. (2011) *The TPR domain in the host Cyp40-like cyclophilin binds to the viral replication protein and inhibits the assembly of the tombusviral replicase*. ***PLOS Pathogens,*** *8(2): e1002491, doi: 10.1371/journal.ppat.1002491.*
42. **Mendu, V.**, Harman-Ware, L., Crocker, M., Jae, J., Stork, J., Morton, S., Placido, A., Huber, G., DeBolt, S. (2011) *Identification and thermochemical analysis of high lignin feedstocks for biofuel and bio-chemical production.* ***Biotechnologyforbiofuels,*** *4 (1): 43, doi:10.1186/1754-6834-4-43.*
43. **Mendu, V.**, Stork, J., Harris, D., and DeBolt, S., (2011) *Cellulose synthesis in two secondary cell wall processes in a single cell type.* ***Plant Signaling & Behavior****, 6 (11), 1638-1643, DOI: 10.4161/psb.6.11.17709.*
44. **Mendu, V.,** Griffiths, J., Persson, S., Stork, J., Downie, B., Voiniciuc, C., Haughn, G. W., DeBolt, S. (2011) *Subfunctionalization of cellulose synthases in seed coat epidermal cells mediates secondary radial wall synthesis and mucilage attachment.* ***Plant Physiology,*** *157, 441-453. https://doi.org/10.1104/pp.111.179069.*
45. **Mendu, V.**, Chiu, M., Barajas, D. Li, Z. & Nagy, P.D. (2010) *Cpr1 cyclophilin and Ess1p parvulin prolyl isomerases interact with the tombusvirus replication protein and inhibit viral replication in yeast model host.* ***Virology****, 406, 342–351. DOI: 10.1016/j.virol.2010.07.022.*
46. Stork, J., Harris, D., Griffiths, J., Williams, B.[Φ], Beisson, F., Li-Beisson, Y., **Mendu, V.**, Haughn, G.W., and DeBolt, S. (2010) *CELLULOSE SYNTHASE9 serves a non-redundant role in secondary cell wall synthesis in Arabidopsis epidermal testa cells.* ***Plant Physiology****, 153, 580-589. DOI: 10.1104/pp.110.154062.*
47. Jia, X., **Mendu, V.** and Tang, G., (2010) *An array platform for identification of stress-responsive miRNAs in plants.* ***Methods Molecular Biology,*** *639: 253-69. doi: 10.1007/978-1-60761-702-0_15.*
48. Jia, X., Wang, W., Ren, L., Chen, Q., **Mendu, V.**, Willcut, B.Φ, Dinkins, R., Tang, X., and Tang, G. (2009) *Differential and dynamic regulation of miR398 and its targets in response to*

*ABA and salt stress in Populus tremula & A. thaliana*. ***Plant Molecular Biology,*** *71: 51-59. doi: 10.1007/s11103-009-9508-8.*

49. Tang, G., Tang, X., **Mendu**, **V**., Tang, X., Jia, X., Chen, Q., and He, L. (2008) *The art of microRNA: Various strategies leading to gene silencing via an ancient pathway*. ***BBA-Gene Regulatory Mechanisms,*** *1779: 655-662. doi: 10.1016/j.bbagrm.2008.06.006*.
50. **Mendu, V.,** Ansari, N.A. and Thota. R. (2003) *Correlation and path analysis in corn/maize (Zea mays L.).* ***Crop Research***, *25 (3): 525-529.*
51. **Mendu, V.,** Ansari N.A. and Kankati., G.K. (2002) *Heterosis for yield and its component characters in corn/maize (Zea mays L.).* ***Research on Crops,*** *3 (1): 72-74.*
52. **Mendu, V.,** Ansari N.A. and Rao, N.V. (2002) Combining ability studies in corn/maize (Zea mays L.). ***Annals of Agricultural Research****, 23 (1), 92-95.*

**Book (Total: 1)**

**1.** *Plant Cell Wall Synthesis and Modification: A Sustainable Approach (2024/2025). Editors: Yogesh Kumar Ahlawat and Venugopal Mendu,* ***CRC Press****, Taylor and Francis group (Accepted).*

**Book Chapters (Total: 10)**

1. Singh, N.P. [#], Mendu, L., Thudi, M., and **Mendu, V.** (2025). *Technological development for analyzing and constructing plant pangenomes (book chapter)*. In Plant Pangenomes and Pangenomics, Editor: Jen-Tsung Chen, Elsevier publications, Paperback ISBN: 9780443267918. eBook ISBN: 9780443267925.
2. Naik, Y.D. *et al.* (2025). *Genomics, Pan-Genomics, and Super Pan-Genomics of Major Oilseed Crops*. In: Pandey, M.K., Mallikarjuna, M.G., Lohithaswa, H.C., S. Aski, M., Gupta, S. (eds) Breeding Climate Resilient and Future Ready Oilseed Crops. Springer, Singapore. *https://doi.org/10.1007/978-981-97-7744-0_2*.
3. Sharma, A., **Mendu, V.** and Reddy, G.V.P. (2024) *Host plant resistance to insect pests in wheat.* In Plant Resistance to Insects in Major Field Crops. S. Kumar, M. Furlong (eds.), *Springer-Nature*, https://doi.org/10.1007/978-981-99-7520-4_5.
4. Mendu, L., Ghose, K.[Ψ] and **Mendu V.**[*] (2022) *Population genomics of cotton*, in *Population Genomics: Crop Plants, [Om P. Rajora (Editor-in-Chief)], Springer-Nature, https://doi.org/10.1007/13836_2022_105.*
5. Ghose, K.[Ψ], Yuan, N.[Ψ], Dampanaboina, L. and **Mendu V.**[*] (2022) *Cisgenesis in the era of genome editing and modern plant biotechnology*, p. 257-279, eBook ISBN:978-3-031-06628-3; Print ISBN:978-3-031-06627-6.
6. Rai, K.M.[Ψ], Ghose, K.[Ψ], Sable, A., Singh, H., Srivastava, R., and **Mendu, V.*** (2019) *Genome Engineering Tools in Plant Synthetic Biology*. In: *Current Developments in Biotechnology and Bioengineering*. Edited by Singh, S.P., Pandey, A. Du, Guocheng and Kumar, S., ***Elsevier publishers***. Chapter 3, pages 47-73. ISBN: 978-0-444-64085-7.
7. Balasubramanian, V.K.[#], Yuan, N.[Ψ], and **Mendu, V.*** (2018) *Bioethanol production from fermentable sugars of plant cell walls. In: Bioethanol and Beyond, Edited by Michel Brienzo, Nova Science Publishers Inc., New York.* Chapter 2, pages 47-68. *ISBN: 978-1-53613-478-0.*
8. Lewis, R., **Mendu**, **V**., McNear, D., and Tang, G. (2009) *Roles of microRNAs in Plant Abiotic Stress, Molecular Techniques in Crop Improvement.* In: Molecular Techniques in Crop Improvement, Edited by S. Mohan Jain and D.S. Brar, Springer-Netherlands, 2nd Edition, 357-372. ISBN: 978-90-481-2966-9.

9. Tang, G., Xiang, Y., Kang, Z., **Mendu**, **V**., Tang, X., Jia, X., Chen, Q., and Tang, X., (2008) *Small RNA technologies: siRNA, miRNA, antagomiR, target mimicry, miRNA sponge and miRNA profiling.* In: Current Perspectives in MicroRNAs, Edited by Shao-Yao Ying, Springer Netherlands, pp 17-33. ISBN: 978-1-4020-8533-8
10. **Mendu, V.** and Hildebrand, D.F. (2006) Plant Hydroperoxide Lyases and Related Enzymes. *IN: Biocatalysis and Biotechnology for Functional Foods and Industrial Products, Edited by Ching Hou and Jei-Fu Shaw, CRC press, Chapter 24, 399-417. ISBN:* 9780849392825.

**Teaching and student evaluations**

| No. | Course | Credit hour(s) | Times taught | Course title | Avg. student rating |
|---|---|---|---|---|---|
| 1 | PSS5325 | 3 | 8 | Transgenic and Plant Cell Genetics (TTU) | 4.8/5.0 |
| 2 | PSS5426 | 4 | 8 | Functional genomics with lab (TTU) | 4.9/5.0 |
| 3 | PSS4426 | 4 | 1 | Introduction to genomics (TTU) | 5.0/5.0 |
| 4 | PSS4100 | 1 | 1 | Senior Seminar (TTU) | 4.8/5.0 |
| 5 | BIOB105 | 3 | 1 | Introduction to Biotechnology (MSU) (**286 students**) | 4.8/5.0 |
| 6 | PSPP642 | 3 | 1 | Structural and Functional Genomics (MSU) | 4.8/5.0 |
| 6 | PSPP5390/6390 | 3 | 1 | Functional Genomics (TAMUK) | 4.7/5.0 |

**Advising/supervisory courses:** PSS 6000, PSS 7000, PSS4100 and PSS4001.

**External Research funding: (Project total $6,732,882; My share: $3,691,105)**

1. Discovering genes, gene regulatory network targets to develop seed coat mediated biochemical *Aspergillus flavus* resistance (*Mendu*). CIMMYT/BMGF, 09/01/2024-06/30/2026. $120,000. Active grant.
2. Fiber yield and quality improvement in tetraploid cotton (*Mendu and Dampanaboina*), Cotton Inc., Cary, NC., 01/01/2018-12/31/2025, Total: $325,568; My share $257,568. Active grant.
3. Genomics-Assisted Introgression and Molecular Dissection of Resistance to Pests and Diseases in Peanut (*Mendu, Burow, Simpson, Monclova-Santana, Bennett, Cason, Tengey, Orent-Frimpong, Asibuo and Gaus-Bowling*), USDA-NIFA, 09/01/2020-03/31/2025, Total: $650,000; My share $67,991. Active grant.
4. Marker-assisted breeding and enhancement of genetic diversity for resistance to leaf spot, tolerance to water deficit and improved oil in peanut (*Burow, M.D., Faye, I., Oteng-Frimpong, R., Tengey, T.K., Cason, J., Mendu, V., Simpson and Haydee, L.*). USAID-Peanut Innovation Lab, 04/01/2024-09/30/2027. $249,903 (terminated in 2025).
5. Developing *Aspergillus flavus* resistant peanut using seed coat biochemical marker(s) (*Mendu, Burow, Sudini and Falalou*), USAID, 10/01/2019-11/30/2024. Total: $419,740; My Share: $377,766.

6. Developing heat stress tolerant wheat and barley lines (*Mendu V., Mendu L., Cook J., and Sherman J.*). Montana Wheat and Barley Committee (MWBC), 01/01/2024-02/28/2025, $60,000.
7. Host Induced Gene Silencing (HIGS) mediated wheat stem sawfly resistance (*Mendu V. and Mendu, L.*). Montana Wheat and Barley Committee (MWBC), 01/01/2024-02/28/2025, $60,000.
8. Developing uniform solid stem wheat varieties for Wheat stem saw fly resistance (*Mendu, V. and Mendu, L.*). Montana Wheat and Barley Committee (MWBC), 01/01/2023-02/28/2025, $217,500.
9. Whole genome sequencing of Montana spring, winter, and durum wheat varieties (*Mendu, V.*), Montana Wheat and Barley Committee (MWBC), 01/01/2022-02/28/2023, Total: $40,000; My share $40,000.
10. Improving photosynthetic efficiency of soybean crop using genome editing (*Mendu and Dampanaboina*), BASF, 01/01/2021-12/31/2023, Total: $615,788; My share $307,894.
11. Genome editing of Cotton and Soybean (TALENs/CRISPR-Cas9) project with BASF (*Mendu and Aleman*), BASF, 05/01/2016-12/31/2021, Total: $1,217,371; My share $1,217,371.
12. Cotton cold tolerance project (*Mendu and Reyes*), BASF, 01/01/2019-12/31/2020. Total: $200,000; My Share: $200,000.
13. Proteomic Analysis of Cotton Seed to Identify Drought Tolerant Protein Marker(s) and Root Cell Wall Assays to Examine Disease Resistance (*Dampanaboina, Ritchie, Ulloa and Mendu*), USDA-NACA, 04/10/2020-09/30/2021. Total: $38,000; My Share: $1,800.
14. Host plant resistance and characterization of genes involved in disease resistance (*Mendu and Mauricio Ulloa*), USDA-NACA, 01/01/2019-12/31/2019. Total: $27,938; My Share: $27,938.
15. Developing abiotic stress tolerance in cotton (*Reyes, Mendu and Ritchie*), Bayer/BASF, 06/01/2016-05/31/2020, Total: $1,100,000; My share $264,496.
16. BT cotton technology acquisition to enhance productivity of elite cotton varieties adaptable to Ethiopia (*Mendu and Weindorf*), Norman E. Borlaug International Agricultural Science and Technology Fellowship Program, Ethiopia: USDA-Foreign Agricultural Service, 11/01/2015-12/31/2017, Total $35,971; My share $32, 373.
17. Borlaug higher Education for Agricultural Research and Development (BHEARD)-Kenya, (*Lyford, Rahman, Carpio, Auld, Mendu and Lawver*), USAID, 08/01/2015-07/31/2018, Total $632,109; My share: $63,210.
18. Deciphering seed coat cell wall factors underlying peanut resistance to *Aspergillus flavus* infection and aflatoxin production (*Mendu and Burow*), USAID/ICRISAT, 07/01/2015-06/30/2017, Total $48,000; My share: $29,000.
19. Role of small RNAs in regulating the abiotic stress response and acclimation in cotton (*Mendu and Payton*), USDA, 09/01/2012-08/31/2017, Total: $282,125; My share: $25,391.
20. Borlaug Higher Education for Agricultural Research and Development (BHEARD)-Ghana program (*Lyford, Mendu and Burow*), USAID, 08/01/2014-07/31/2018, Total: $444,205; My share: $148,053.
21. Identification of plant cell wall degrading soil microbial genes/ enzymes (*Mendu and Weindorf*), OIA: Norman E. Borlaug International Agricultural Science and Technology Fellowship Program Asia & Latin America (Malaysia): USDA-Foreign Agricultural Service, 08/01/2014-12/31/2016, Total: $31,100; My share: $27,990.

22. Effects of ABVista feed-grade fibrolytic enzyme on in-vitro digestibility of roughages and byproducts (*Sarturi, Mendu, Ballou and Galyean*), DeLaval Manufacturing, 09/01/2016-12/31/2017, Total: $6,534; My share $1,306.
23. Effects of Inoculants Added to Sorghum Ethanol Co-product and Low-quality Roughage Blend Silages on Silage Fermentation Profile and Losses: DeLaval Manufacturing (*Sarturi and Mendu*), 11/21/2013-11/30/2014, Total: $31,029; My share: $1,551.

**Not funded:** Total funding requested: $36,978,111 (USDA, NSF and MWBC)
**Mentoring (Students/Postdoc/visiting scientists/faculty)**

**I. Faculty mentoring and promotion and tenure package evaluations.**

1. **Dr. Suchismita Mondal**, Assistant professor, Montana state university (2022-2024)
2. **Dr. Quing Yan**, Assistant professor, Montana state university (2023-2024)
3. **Faculty promotion and tenure package evaluations**: Evaluated and voted on faculty promotion and tenure packages (6 individual faculty members) and one full professor.

**II. Graduate students (Total: 26: 8Ph.D. and 16 MS)**

*In progress (7: 2Ph.D. and 5MS)*

1. **Nagendra Prathap Singh,** Ph.D. program (Fall, 2025-present)
2. **Ramesh Mathivanan**, Ph.D. program (Fall, 2024-present)
3. **Mounika Buddha Sadineni,** MS program, TAMUK (Fall, 2024-present)
4. **Nikhil Gelle,** (Fall, 2024-present)
5. **Uday Kiran Reddy Chamala,** (Fall, 2024-present)-Non-thesis
6. **Keerthana Daffodil Bhattu**, (Fall, 2024-present)-Non-thesis
7. **Darshan Chikapalli**, (Fall, 2024-present)-Non-thesis

*Completed (15: 6Ph.D. and 9 MS)*

1. **Nagendra Prathap Singh,** MS (Summer, 2025t)
2. **Leslie Commey (Co-Chair),** Ph.D. (Summer, 2024)
3. **Julia Jellema,** M.S. (Spring, 2024)
   a. Outstanding Graduate Student award, Montana State University.
4. **Gabriella Hale (Co-Chair),** Ph.D. (Spring, 2023)-***McNair Scholar student***
5. **Kamalpreet Kaur Dhillan**, M.S. (Fall, 2020)
6. **Lindsay Williams**, M.S. (Summer, 2019)
7. **Gayani Jalathge**, M.S. (Summer, 2019)
8. **Vimal Kumar Balasubramanian**, Ph.D. (Fall, 2018)
   a. *Outstanding Dissertation Award"* for 2019 in the category of Biology/Life Sciences.
   b. *"George Tereshkovich Plant and Soil Science Outstanding Graduate (Ph.D.) student award, 2019.*
9. **Theophilus K. Tengey**, Ph.D. (Summer, 2018)
10. **Christopher J. Cobos**, M.S. (Summer, 2018)
11. **Haydee Echevarria Laza**, Ph.D. (Spring, 2018)
12. **Anh Nam Phu Bui,** Ph.D. (Fall, 2017)
13. **Sandi Win Thu**, M.S. (Spring, 2017)
14. **Cassie M. Franke** (Welker) (2015)

a. *"George Tereshkovich Plant and Soil Science Outstanding Graduate (MS) student award, 2015.*

15. **Amrita Dhal** (2015)

**III. Postdoctoral Research Scholars (Total: 7):**

*Completed*

1. **Dr. Ning Yuan** (September 2016-December 2021)
2. **Dr. Kaushik Ghose** (September 2016- December 2021)
3. **Dr. Rozalynne Samira** (September 2019-August 2021)
4. **Dr. Nanaji Yerramsetti** (October 2019 – June 2020)
5. **Dr. Krishan Mohan Rai** (December 2014 - February 2019)
6. **Dr. Mingxiong (David) Pang** (May 2014 - Aug. 2015)
7. **Dr. Nagaraju Dharavath** (November 2013 - August 2014)

**IV. Research Scientists (Total: 2):**

*Completed*

1. **Dr. Ning Yuan** (September 2021-December 2021)
2. **Dr. Kaushik Ghose** (September 2021-December 2021)

**V. Other staff**

**1. Visiting international graduate students (Total: 2)**

1. **Leonel Domingos Moiana**, Pós-Graduação em Genética e Melhoramento, Universidade Estadual de Maringá, **Brazil** (2014).
2. **Mary Luz Yaya Lancheros**, Dep. of Biology, Pontificia Universidad Javeriana, **Columbia** (2016).

**2. Borlaug Fellows (Total: 2)**

1. **Mei Mei Hii**, Sarawak Biodiversity Center, Kuching, **Malaysia** (2015)
2. **Dr. Tesfaye Disassa Bitema**, Ethiopian Institute of Agricultural Research, Addis Ababa, **Ethiopia** (2016).

**3. Visiting Scholar (Total: 1):**

1. **Jing Shi,** Gansu Agricultural University, Lanzhou, China, (August 2019-August,2020).

**4. Research aide (Total: 1):**

1. **Kyle Merry** (2018-2020).

**5. Internships (Total: 1):**

1. **Margaret Elliot** *(MS in Ag. Edu and Communications)*- Consortium for Advanced Bioeconomy Leadership Education (CABLE) program (https://bioproducts.osu.edu/cable).

**6. Undergraduate students-research (Total: 17)**

1. **Isabella Remondini** Plant Sciences and Plant Pathology, MSU (2024)
2. **Brett Bartell** Plant Sciences and Plant Pathology, MSU (2024)
3. **Lakyn Sonday** Plant Sciences and Plant Pathology, MSU (2024)

4. **Alexandria Kurowski**, Plant Sciences and Plant Pathology, MSU (2022-2023)
5. **Addison Marcus**, Plant Sciences and Plant Pathology, MSU (2022)
6. **Kierstin Hitt,** Plant & Soil Science, (October 2020-April 2021)
7. **Madison Dennis,** Plant & Soil Science, (January 2020-May,2020)
8. **Gabriella Hale**, Plant & Soil Science, (August 2018-July,2020), ***McNair Scholar student***
9. **Carlie S. Witte**, Plant & Soil Science, (August 2018-Dec,2019)
10. **Jake Weatherford,** Plant & Soil Science, (August 2018-December 2019).
11. **Chukwuemeka N. Nwauche**, Mechanical Engineering, TTU (June 2017-December 2018).
12. **Jared Soufley,** Plant & Soil Science, TTU (August 2016-October 2018).
13. **Graham Lavine**, Dep. Of Plant & Soil Science, TTU, (June 2016-December 2016).
14. **Toritseju Arenyeka**, Dep. of Biological Sciences, TTU (August 2015-December 2015)
15. **Taylor Person**, Dep. of Plant & Soil Sciences, TTU (October 2014-May 2015)
16. **Julianna Shuneman**, Dep. of Plant & Soil Sciences, TTU (August 2014-May 15)
17. **Cassie Welker**, Dep. of Chemistry & Biochemistry, TTU (September 2013-May 2014)

**7. Undergraduate student advisees (Total: 36)**

1. **Allison Buhr,** Plant Sciences and Plant Pathology, MSU (Spring, 2024)
2. **Trent Green,** Plant Sciences and Plant Pathology, MSU (Spring, 2024)
3. **Katherine Steinjann,** Plant Sciences and Plant Pathology, MSU (2024)
4. **Erica Diviero,** Department of Ecology, MSU (2024)
5. **Jack Hietpas**, Department of Ecology, MSU (2024)
6. **Calvin Fortman**, Department of Ecology, MSU (2023-2024)
7. **Kelan Heath**, Department of Ecology, MSU (Fall, 2023-2024)
8. **Jack Hietpas**, Department of Ecology, MSU (Fall, 2023-2024)
9. **Taylor King**, Department of Ecology, MSU (Fall, 2023-2024)
10. **Levi Kirby**, Department of Ecology, MSU (Fall, 2023-2024)
11. **Casey McGiboney**, Department of Ecology, MSU (Fall, 2023-2024)
12. **Reece Olson**, Department of Ecology, MSU (Fall, 2023-2024)
13. **Noga Navot**, Department of Ecology, MSU (Fall, 2023-2024)
14. **Malia Martins**, Department of Ecology, MSU (Fall, 2023-2024)
15. **Erica Diviero,** Department of Ecology, MSU (Fall, 2023-2024)
16. **Nicholas Lamirand**, Plant Sciences and Plant Pathology, MSU (Fall, 2023-2024)
17. **Isabella Long,** Plant Sciences and Plant Pathology, MSU (Fall, 2022-2024)
18. **Carsyn Daniels,** Plant Sciences and Plant Pathology, MSU (Fall, 2022-2024)
19. **Neva Grewell,** Plant Sciences and Plant Pathology, MSU (Fall, 2022-2024)
20. **Rhett Wolery,** Plant Sciences and Plant Pathology, MSU (Fall, 2022-2024)
21. **Leah Williams,** Plant Sciences and Plant Pathology, MSU (Fall, 2022-2024)
22. **Cooper Lysek-Gomez,** Plant Sciences and Plant Pathology, MSU (Fall, 2022-2024)
23. **Akshardeep Singh Brar,** Plant Sciences and Plant Pathology, MSU (Fall, 2022-2024)
24. **Gavin Adkins,** Plant Sciences and Plant Pathology, MSU (Fall, 2022-2024)
25. **Sam Addiston,** Dep. of Plant & Soil Sciences, TTU (Spring, 2020-Fall 2021)
26. **Sutton Senter,** Dep. of Plant & Soil Sciences, TTU (Spring, 2020- Fall 2021)
27. **Hayden Finkenbinder,** Dep. of Plant & Soil Sciences, TTU (Fall, 2019- Fall 2021)
28. **Brandon Douglas**, Dep. of Plant & Soil Sciences, TTU (Fall, 2019- Fall 2021)

29. **Scott Handley**, Dep. of Plant & Soil Sciences, TTU (Spring, 2018- Fall 2021)
30. **William Windham,** Dep. of Plant & Soil Sciences, TTU (Spring, 2018- Fall 2021)
31. **Berend, Mitchell**, Dep. of Plant & Soil Sciences, TTU (Fall, 2017- Fall 2021)
32. **Mark Allen**, Dep. of Plant & Soil Sciences, TTU (Fall, 2016)
33. **Erick Barkowsky,** Dep. of Plant & Soil Sciences, TTU (Fall, 2016-2021)
34. **Aaron Calvin,** Dep. of Plant & Soil Sciences, TTU (Fall, 2016)
35. **Britton (Gage) Costello,** Dep. of Plant & Soil Sciences, TTU (Fall, 2016)
36. **Jake Weatherford,** Dep. of Plant & Soil Sciences, TTU (2016-2021)

**8. Committee member of other faculty students (Total: 37)**

1. **Muskan Tiwari**, MS program, Major professor: Dr. Mark Burow, Dep. of Plant & Soil Science, TTU, (Spring, 2025-present).
2. **Sainjot Singh Gill**, (Spring, 2025-present), MS program, Major professor: Dr. Greta Schuster, Agriculture, Agribusiness, and Environmental Sciences, TAMUK. (Spring, 2025-present)
3. **Deekshitha Garimella**, (Spring, 2025-present), MS program, Major professor: Dr. Greta Schuster, Agriculture, Agribusiness, and Environmental Sciences, TAMUK.
4. **Akshara Bathini,** PhD program, Major professor: Dr. Venugopal Mendu/Dr. Jamie Sherman, Professor, Plant Science and Plant Pathology, MSU, (Spring, 2022-2024).
5. **Charles Miller,** MS. program, Major professor: Dr. Andreas Fischer, Professor, Plant Science and Plant Pathology, MSU, (Fall, 2023-2024).
6. **Duncan Pantos,** MS program, Major professor: Dr. Sue Mondal, Professor, Plant Science and Plant Pathology, MSU, (Fall, 2023-2024).
7. **Emmanuel Annan**, Ph.D. program, Major professor: Dr. Li Huang, Professor, Plant Science and Plant Pathology, MSU, (Fall, 2022-2025).
8. **Jared Lile**, Ph.D. program, Major professor: Dr. Jason Cook, Assistant Professor, Plant Science and Plant Pathology, MSU, (Spring, 2022-2024).
9. **Chloe Hinson,** MS. program, Major professor: Dr. Jennifer Lachowiec, Associate Professor, Plant Science and Plant Pathology, MSU (2023-2024).
10. **Yihui Yuan**, Ph.D. program, Major professor: Dr. Huazhong Shi, Associate Professor, Dep. of Chemistry & Biochemistry TTU, (Fall, 2019-2024).
11. **Thuvaraki Balasubramaniam,** Ph.D. program, Major professor: Dr. Hong Zhang, Professor, Dep. Biological Sciences, TTU, (Spring, 2023).
12. **Md Fakhrul Azad**, Ph.D. program, Major professor: Dr. Chris Rock, Professor, Dep. Biological Sciences, TTU, (Fall, 2022).
13. **Joy (Cheng Jung) Song**, Ph.D. program, Major professor: Dr. Mark Burow, Dep. of Plant & Soil Science, TTU, (Fall, 2022).
14. **Heshani De Silva Welligoda**, Ph.D. program, Major professor: Dr. Chris Rock, Professor, Dep. Biological Sciences, TTU, (Spring, 2022).
15. **Anuradha Dhingra,** Ph.D. program, Major professor: Dr. Chris Rock, Professor, Dep. Biological Sciences, TTU (Fall, 2021).
16. **Chase Victorson** M.S. (online and non-thesis, Fall 2021)
17. **Kharenn Nunes Vailant,** Ph.D. program, Major professor: Dr. Robert Wright, Dep. of Plant & Soil Science, TTU, (Summer, 2021).
18. **Ruvini Mathangadeera**, Ph.D. program, Major professor: Dr. Hong Zhang, Professor, Dep. Biological Sciences, TTU, (Summer, 2021).

19. **Jin Gan**, MS. program, Major professor: Dr. Chris Rock, Professor, Dep. Biological Sciences, TTU, (Summer, 2021).
20. **Prakash Parajuli**, Ph.D. program, Major professor: Dr. Noureddine Abidi, Department of Plant & Soil Science, TTU, (Summer, 2021).
21. **Inosha Wijewardene,** Ph.D. program, Major professor: Dr. Hong Zhang, Professor, Dep. Biological Sciences, TTU, (Spring, 2020).
22. **Neellie Hill**, Ph.D. program, Major professor: Dr. Cortney Meyers, Professor, Dep. Agricultural Education and Communication, TTU (Summer, 2020).
23. **Puneet Mangat**, Ph.D. program, Major professor: Dr. Rosalyn Shim, Dep. of Plant & Soil Science, TTU, (2018-2019).
24. **Joshua Singleton**, MS program, Major professor: Dr. Rosalyn Shim, Dep. of Plant & Soil Science, TTU, (Summer, 2019).
25. **Amal Bouyanfif**, Ph.D. program, Major professor: Dr. Eric Hequet, Dep. of Plant & Soil Science, TTU, (Spring, 2019).
26. **Niwanthi Dissanayake**, Ph.D. program, Major professor: Dr. Noureddine Abidi, Dep. of Plant & Soil Science, TTU, (Spring, 2019).
27. **Jayan Ukwatta**, Ph.D. program, Major professor: Dr. Huazhong Shi, Associate Professor, Dep. of Chemistry & Biochemistry TTU, (Fall, 2018).
28. **Pushpinder Kaur**, MS program, Major professor: Dr. Benildo de los Reyes, Dep. of Plant & Soil Science, TTU, (Fall, 2018).
29. **Isaiah Catalino Pabuayon**, Ph.D. program, Major professor: Dr. Benildo de los Reyes, Dep. of Plant & Soil Science, TTU (Fall, 2018).
30. **Sumedha Liyanage**, Ph.D. (Graduated 2017); Major prof.: Dr. Noureddine Abidi, Dep. of Plant & Soil Science, TTU.
31. **Karl Brauer,** Ph.D. program, Major professor: Dr. Wen Wei Xu, Dep. of Plant & Soil Science, TTU, (Spring, 2015-2018).
32. **Travis Witt,** Ph.D. (Graduated 2017); Major prof.: Dr. Glen Ritchie, Dep. of Plant & Soil Science, TTU.
33. **Poorna Wansapura**, Ph.D. (Graduated 2017); Major prof.: Dr. Noureddine Abidi, Dep. of Plant & Soil Science, TTU.
34. **Somrita Basu,** MS (Graduated 2016); Major prof.: Dr. Scott Holaday, Dep. Biological Science, TTU.
35. **Deepika Mishra,** Ph.D. (Graduated 2016); Major prof.: Dr. Dick Auld, Dep. of Plant & Soil Science, TTU.
36. **Mishon Hopkins**, MS-Non-thesis (Graduated 2015); Major prof.: Dr. Noureddine Abidi, Dep. of Plant & Soil Science, TTU.
37. **Kishor Gautam,** Ph.D. (Graduated 2015); Major prof.: Dr. Michael Ballou, Dep. of Animal & Food Science, TTU.

**Seminars/talks (31)**

**A. Domestic (16)**

1. **Mendu, V.,** *Wheat Sawfly Resistance and Genome Sequencing*. MGGA convention, Pacific Steel & Recycling Arena, MT ExpoPark, Great Falls, MT (11/28/23-11/30/23).
2. **Mendu, V.,** *Navigating and advancing crop production agricultural systems to improve national and global food security*. NCSU/USDA, Raleigh, NC (08/22/23).

3. **Mendu, V.,** *Genetics and genomics of stress tolerance*. Western Wheat Workers Association meeting, Bozeman, MT (06/26/23).
4. **Mendu, V.,** *Enhancing cellulose content of plant biomass for improving cellulosic ethanol yield*, USDA-ARS, Peoria, IL, Virtual (06/08/23).
5. Mendu. L. and **Mendu, V.,** *Developing uniform solid stem (USS) varieties for wheat stem sawfly resistance.* MWBC's board meeting (spring). Montana State University, Bozeman, Montana (04/11/23).
6. **Mendu V.**, *Wheat and barley improvement against biotic and abiotic stresses.* MGGA convention, Heritage Inn in Great Falls, MT (11/29/22-12/01/22).
7. **Mendu V.**, *Gene discovery for crop improvement using model and crop plants.* University of Kentucky, Lexington, KY, (Invited, *03/11/2022*).
8. **Mendu V.**, *Gene discovery for crop improvement using model and crop plants,* Montana State University, Bozeman, MT, (Invited, *08/06/2021*).
9. **Mendu V.** *Genetic improvement of sorghum for biofuel and biomass traits.* Center for Sorghum Improvement Seminar, Kansas State University, (Invited, *05/11/2021*), Virtual.
10. Yuan, N. **Mendu V.** *Beyond flowering time: diverse functions of blue light receptor FKF1*. Clemson University, (Invited, *03/26/2021*).
11. **Mendu V.** *Light mediated regulation of cellulose biosynthesis.* Dep. Of Biological Sciences, (Invited, *11/15/2018*), TTU, Lubbock, TX.
12. **Mendu V.** *Importance of cell walls in biomass-based biofuel production.* Dep. Of Plant & Soil Science, *09/22/2017*, TTU, Lubbock, TX.
13. **Mendu V.** *Plant translational genomics: From model species to crop plants* (Invited, 01/12/2017), NCSU, Raleigh, NC.
14. **Mendu V.** *Functional evolution and molecular characterization of genes involved in cotton fiber initiation* (Invited, 10/15/2015), Dep. Of Plant & Soil Science, TTU, Lubbock, USA.
15. **Mendu V.** *Cellulose biosynthesis in Arabidopsis seed coat*. (Invited, 02/12//2013), Dep. Of Plant & Soil Science, TTU, Lubbock, TX.
16. **Mendu V.** *Subfunctionalization of cellulose synthases in seed coat epidermal cells mediates secondary radial wall synthesis and mucilage attachment*. (Invited, 12/10/2011), University of Kentucky, Lexington, KY.

**B. International (15)**

1. **Mendu, V**. *Seed coat mediated Aspergillus flavus resistance strategies in peanut.* (Invited, *06/05/2025*). Genome Editing for Resistance Against Maize Lethal Necrosis (MLN) Disease Phase-2 KICK OFF MEETING, Project Review and Planning Meeting, ICRAF campus, Nairobi, Kenya.
2. **Mendu, V**. *Seed coat mediated Aspergillus flavus resistance in peanut.* (Invited, *05/21/2025*). CIMMYT, Mexico city, Mexico.
3. **Mendu, V**. *Cell wall biology and horticulture crop improvement,* YSR Horticulture university, Andhrapradesh, India, (Invited, *01/30/2023*).
4. Sudini, H, Falalou, H, Burrow, M, and **Mendu, V.,** (2021) Novel findings for future research in groundnut aflatoxin management. International Conference on Peanut Production Technology for Improved Efficiency and Safety. 22-24 November, Nanjing, PR China. Hybrid mode Conference (Virtual for International Participants and In-person for Chinese participants).

5. **Mendu V.** *Developing Aspergillus flavus resistant peanut using seed coat biochemical marker(s)* (Invited, June 2020), Feed the Future Innovation Lab for Peanut, annual meeting (06/02-2020-06/04-2020). ***Virtual presentation***.
6. **Mendu V.** *Developing Aspergillus flavus resistant peanut using seed coat biochemical marker(s)* (Invited, July 2019), Feed the Future Innovation Lab for Peanut, Peanut lab project launching meeting, **Tamale, Ghana**.
7. **Mendu V.** *Plant translational genomics: From model species to crop plants* (Invited, December 2017), Savanna Agricultural Research Institute (SARI), **Tamale, Ghana**.
8. **Mendu V.** *Plant translational genomics: From model species to crop plants* (Invited, July 2017), Ethiopian Institute of Agricultural Research, Holetta, **Addis Ababa, Ethiopia**.
9. **Mendu V.** *Plant translational genomics: From model species to crop plants* (Invited, June 2017), Dep. of Biology, Pontificia Universidad Javeriana, **Bogota, Columbia**.
10. **Mendu V.** *Use of high lignin feed stocks for clean energy in underdeveloped and developing countries* (Invited, March 2017). United Nations Environmental Program (UNEP), **Copenhagen, Denmark**.
11. **Mendu V.** *Understanding the cotton fiber initiation mechanism* (Invited, June 2016), Cotton Research Institute, **Anyang**, **China**.
12. **Mendu V.** *Identification and characterization of genes involved in cotton fiber initiation* (Invited, June 2016), Cotton Research Institute, **Zhengzhou**, **China**.
13. **Mendu V.** *Using Arabidopsis plant model system for cotton fiber initiation studies* (Invited, March 2016), Regional Agricultural Research Station, Warangal, Telangana, **India**.
14. **Mendu V.** *Functional evolution and molecular characterization of genes involved in cotton fiber initiation* (Invited, January 2016), Sarawak Biodiversity Center, Kuching, **Malaysia**.
15. **Mendu V.** *Plant cell wall composition, biosynthesis, and biofuel production from plant biomass* (Invited, January 2016). Sarawak Biodiversity Center, Kuching, **Malaysia**.

**Conference poster/Abstract/Oral presentations (44)**

($^{\Phi}$Undergraduate student; $^{\#}$Graduate student; $^{\#\#}$Graduate student from another lab; $^{\Psi}$Postdoc; $^{\delta}$Borlaug Fellow/visiting student,$^{\Omega}$Domestic collaborator, $^{\gamma}$ International collaborator and $^{\chi}$McNair Scholar student.)

1. Tengey, TK.*, Simpson, C.E., Cason, J., Hillhouse, A., Mendu, V. and Burow, M.D., (2025) An improved KASP Marker-based Genetic Linkage Map of an Interspecific Introgression Population of Peanut (*Arachis hypogaea* L.) and Identification of Leafspot Resistance QTLs. APRES (scheduled)
2. Mathivanan, R. K.$^{\#}$, Reddy, U.K.$^{\#}$, Mendu, L., and **Mendu, V.** 2024. Peanut Seed Coat Phenolic Pathway Offers Potential Resistance Against *Aspergillus flavus*. 1st Three Minute (3MT) thesis competition. Ball room, Texas A&M University-Kingsville. 11/15/2024.
3. Singh, N. P.$^{\#}$, Mendu, L., and **Mendu, V.** 2024. A Breakthrough In Cross-kingdom Gene Regulation: Implications For WSS Resistance In Wheat. 1st Three Minute (3MT) thesis competition. Ball room, Texas A&M University-Kingsville. 11/15/2024.
4. Munoz, M.$^{\Phi}$, Klemashevich, C., **Mendu, V.,** Zamora, E.$^{\#\#}$, Schuster, G., 2024. Evaluating the medicinal potential of Cilantro (Coriandrum sativum): Relative quantification of bioactive compounds in leaf vs stem. Mc Nair Symposium, Ball room, Texas A&M University-Kingsville. 11/04/2024.

5. Commey, L.[#], H. Sudini, H.[γ], Falalou, H., Tengey, T. K.[#γ], Burow, M.D.[Ω], and **V. Mendu** (2024) Developing *Aspergillus flavus* resistant peanut using seed coat biochemical markers. ***USAID-PIL annual meeting***, 11/05/2024 (Virtual).
6. Commey, L[#], Mechref, Y., and Burow, M.D., & **Mendu, V**., (2024) Secondary Metabolites Present in Peanut Seedcoat Inhibit *A. flavus* Growth and Reduce Aflatoxin Contamination. American Peanut Research and Education Society (APRES) conference. July 9-11th, The Omni, Oklahoma City, OK. ***1st place poster presentation in Ph.D. division***.
7. Bathini, A.[#], Mendu, L. and Mendu, V. (2024) Developing uniform solid stem varieties against wheat stem sawfly. MWBC (Montana Wheat Barley committee, March madness in conjunction with Montana Grain Growers Association, Ball rooms, Montana State University, Bozeman, March 18th, 2024. ***Won a poster award***.
8. Singh, N.P.[#], Mendu, L. and **Mendu,V**. (2024) Pangenome Construction Using Whole-Genome Resequencing to Unravel the Genetic Variation of Montana Winter, Spring, and Durum Wheat Varieties". (Montana Wheat Barley committee, March madness in conjunction with Montana Grain Growers Association, Student center Ball room, Montana State University, Bozeman, March 18th, 2024.
9. Singh, N.P.[#], Mendu, L. and **Mendu, V**. (2024) Pangenome Construction Using Whole-Genome Resequencing to Unravel the Genetic Variation of Montana Winter, Spring, and Durum Wheat Varieties. 2024 PAG XXIX-International Plant and Animal genome conference, Jan 12-17, Town & Country Resort and Convention Center, San Diego, CA, USA.
10. Burow, M. D., Tengey, T.[#], Oteng-Frimpong, R., Bennett, R.[Ω], Wheeler, T. A.[Ω], Gaus-Bowling, T.[Ω], **Mendu, V**., Pham, H., Cason, J.[Ω], and C. Simpson[Ω]. (2024) Towards Development of a Near-Isogenic Wild Species Introgression Population of Peanut. 2024 PAG XXIX-International Plant and Animal genome conference, Jan 12-17, Town & Country Resort and Convention Center, San Diego, CA, USA.
11. Singh, N.P.[#], Mendu, L. and **Mendu, V.** (2023) Whole-genome resequencing to unravel the genetic variation of Montana winter, spring, and durum wheat varieties. December 05-06, Montana Seed Trade Association Social, Best Western Plus GranTree Inn, Bozeman, MT, USA.
12. L. Commey[#], H. Sudini, H.[γ], Falalou, T.K. Tengey[#γ], M.D. Burow[Ω], **V. Mendu** (2023) Response of different peanut seed color genotypes under irrigated conditions and water deficit conditions to *A. flavus* and aflatoxin contamination. APRES meeting, July 11-13, The Desoto, Savannah, GA.
13. Burow, M. D., Tengey, T.[#], Oteng-Frimpong, R., Bennett, R.[Ω], Wheeler, T. A.[Ω], Gaus-Bowling, T.[Ω], **Mendu, V.,** Pham, H., Cason, J.[Ω], and C. Simpson[Ω]. (2023) Towards Development of a near-isogenic introgression population of peanut. APRES meeting, July 11-13, The Desoto, Savannah, GA.
14. Bathini, A.[#], Mendu, L. and **Mendu, V.** (2022), Seedling heat tolerance in barley. Montana Grain Growers Association Convention, Heritage Inn in Great Falls, MT. 11/29/22-12/01/22.
15. Hale, G[#χ], Yuan, N[#], Dampanaboina, L[#], Ritchie, G[Ω], and **Mendu, V.,** (2021) Blue-light receptor's relationship in regulating biomass & stomatal density in *Arabidopsis thaliana*. UIUC-Corteva Plant Sciences Symposium. October 15th. Virtual conference.
16. Hill, N.[##], Meyers, C.[Ω], Li, N.[Ω], Doerfert, D.[Ω], & **Mendu, V.** (2021). A systematic metaphor analysis of gene-editing in agriculture in online U.S. news (Paper presentation). September 27-29, Western Region American Association for Agricultural Education Annual Conference, Kimpton Armory Hotel, Bozeman, MT, United States.

17. Hill, N.[##], Meyers, C.[Ω], Li, N.[Ω], Doerfert, D.[Ω], & **Mendu, V.** (2021). Persuasive effects of metaphors regarding gene-editing in agriculture. National Research Conference, American Association for Agricultural Education. May 2021. Virtual conference.
18. Commey, L[#], Sudini, H[γ], Falalou, H[γ], Tengey, T.K.[#], Burow, M.D. and & **Mendu, V**., (2021) Insoluble polyphenols mediate *Aspergillus flavus* resistance in peanut. American Peanut Research and Education Society (APRES) conference. July 13-16th, Virtual conference.
19. McDonald, J., Dampanaboina, L., Chris, C.[#], Yerramsetti, N., **Mendu. V.** and Abdul, H[Ω]. (2021). Texas Wildflowers extract inhibits the growth of gram-positive wound pathogens. Student research week presentations, TTU.
20. Hill, N.[##], Meyers, C.[Ω], Li, N.[Ω], Doerfert, D.[Ω], & **Mendu, V.** (2020). A Descriptive Analysis of Twitter Content Regarding Gene-Editing in Agriculture. Western Region Conference, American Association for Agricultural Education. September 2020. Virtual conference.
21. Commey, L[#], Sudini, H[γ], Falalou, H[γ], Tengey, T.K.[#], Burow, M.D. and & **Mendu, V**., (2020) Seed coat biochemicals mediates *Aspergillus flavus* resistance in peanut. Peanut Innovation Lab Graduate Student Presentations, August 12-26, virtual conference.
22. Commey, L[#], Sudini, H[γ], Falalou, H[γ], Tengey, T.K.[#], Burow, M.D. and & **Mendu, V**., (2020) Seed coat biochemicals mediates *Aspergillus flavus* resistance in peanut. APRES meeting, July 14-17, virtual conference.
23. Hale, G.A.[Φ χ], Yuan, N.[Ψ], Luth, K.[##], Ritchie, G.[Ω] and & **Mendu, V**., (2020) Investigating the Physiological Responses in *Arabidopsis fkf1* Mutant. Beltwide Cotton Conference, January 8-10, Austin, Texas, USA.
24. Singla-Rastogi, M., Charvin, M., Thiebeauld, O., Fortunato, A.E., Ravet, A., **Mendu, V.** and Navarro, L[γ]. (2019) Assessing the role of small RNAs in inter-kingdom communication during plant-bacterial interactions. 2019 IS-MPMI XVIII Congress, SEC Centre, Glasgow, Scotland.
25. Yuan, N.[Ψ], Balasubramanian, V. K.[#], Chopra, R.[##] & **Mendu, V**., (2019) FKF1, a photoperiodic flowering time regulator negatively regulates cellulose biosynthesis. American Society of Plant Biology-2019, August 03-07, San Jose, California, USA.
26. Williams, D. L[#]. Balasubramanian, V. K.[#], Yuan, N.[Ψ] and **Mendu, V.** (2019) Interaction studies of clock-mediated gene FKF1 and protein candidates involved in early flowering. 10th Texas Tech Annual Biological Sciences Symposium, April 26-27, TTU Student Union Building, Lubbock, TX.
27. Hale, A. G.[Φ χ], Ritchie, G.[Ω] and **Mendu, V.** (2019) Investigating the physiological responses in Arabidopsis FKF1 mutant. McNair Research Symposium, TTU Library, April 15.
28. Tengey[#], T. K, Simpson, C. E., Hillhouse, A., **Mendu, V.**, and Burow, M. D.[Ω] (2018) Analysis of a $BC_3F_6$ interspecific peanut introgression population using genome- specific SNP markers. 50th APRES meeting, July 10-12, Williamsburg, VA, USA.
29. **Mendu, V**., Yuan, N.[Ψ], Balasubramanian, V. K.[#] & Chopra, R.[##] (2018) Blue light regulates cellulose biosynthesis through a specific photoreceptor. American Society of Plant Biology-2018, July 13-18, Montreal, Canada.
30. **Mendu, V**., Yuan, N.[Ψ], Balasubramanian, V. K.[#] & Chopra, R.[##] (2018) Negative regulation of cellulose biosynthesis by a photoperiodic gene. VIII Cell Wall Research Conference, June 18-22, Asilomar, California, USA.
31. Balasubramanian, V. K.[#], Xin, Z.[Ω] and **Mendu, V**. (2018) Identification and characterization of sorghum *vascular bundle (vb*) mutants for biomass improvement. Sorghum Improvement

Conference of North America (SICNA), January 28-31, Donald Danforth Plant Science Center, St. Louis, Missouri, USA.

32. **Mendu, V**. Balasubramanian, V. K.[#] & Rai K.M.[Ψ] (2017) Role of Cellulose Synthase A 5 (CESA5)-mediated glucan chains in intermolecular association. American Chemical Society, 73rd Annual Southwest Regional Meeting, 29th October-1st November, Lubbock, TX,
33. Balasubramanian, V. K.[#], **Mendu, V**., & Xin, Z.[Ω] (2017) Identification and characterization of sorghum vascular bundle (*vb*) mutant for biomass improvement. American Chemical Society, 73rd Annual Southwest Regional Meeting, 29th October-1st November, Lubbock, TX, USA.
34. Tengey, T.K.[#], Wilson, J.N., Chopra, R.[##], Simpson, C.E., Chagoya, J., Hillhouse, A., **Mendu, V.**, Burow, M.D.[Ω] (2017) Development of a draft SNP-Based Genetic Linkage Map of a Peanut $BC_1$ Interspecific Introgression Population. 49th APRES meeting, July 11-13, Albuquerque, NM, USA.
35. Bui, A.P.N.[#], Welker, C.[#], Pang, M.[Ψ] and **Mendu V.** (2017) Independent neo-functionalization of cotton fiber initiation factor. American Society for Plant Biologists (ASPB), Honolulu, Hawaii (June 24-28).
36. Thu, S.W.[#], Sandhu, D., Rajangam, A., Balasubramanian, V. K.[#], Rai, K. M.[Ψ], Palmer, R. G., and **Mendu, V*** (2017) Isolation and characterization of a male fertility gene (*Ms4*) in soybean. Southern Section-American Society for Plant Biologists (ASPB), Orlando, Florida (March 8-10)
37. Balasubramanian, V.K.[#], Rai, K.M.[Ψ], Thu, S.W.[#], Hii, M.M.[δ], and **Mendu, V.*** (2017) Genome-wide identification of multifunctional laccase gene family in cotton (*Gossypium spp.*); expression and biochemical analysis during fiber development. Plant and Animal Genome conference-XXV, San Diego, CA (January 14-18).
38. Witt, T.[##], Ulloa, M., **Mendu, V.**, Pelletier, M., and Ritchie, G.[Ω] (2017). Identifying and Breeding Drought Tolerant Cottons (*Gossypium* spp.) treated with EMS-mutant agent on the Texas High Plains. Beltwide Cotton Conference, Dallas, TX. (January 4-6th)
39. Dhingra A.[##], Balasubramanian V.#, Basu S.[##], **Mendu, V.**, and Rock C., (2016). The *Wilty 4* mutant in maize (corn)- effect on vascular bundle cell wall S/G lignin composition. American Society of Plant Biologists (ASPB), Austin, TX (July 12-15th,).
40. Tengey, T.K.[#], Chopra, R.[##], Simpson, C.E., **Mendu, V.**, Burow, M.D.[Ω] (2016). Using Sub-Genome Specific Transcriptome-derived SNP Markers to Develop a Genetic Linkage Map for a $BC_1$ Mapping population in Peanut (*Arachis hypogaea* L.). 48th American Peanut Research and Education Society meeting (July 11-14th), Clearwater, FL.
41. Mishra, D.[##], Hendon, B.[##], Vise, R.K., Rai, K.M.[Ψ], Hugie, K., Smith, C. W., **Mendu, V**. Hequet, E.F. and Auld, D.L.[Ω] (2016) Genetic mapping of fiber quality traits in upland cotton using SSR markers. Beltwide Cotton Conference, New Orleans, LA.
42. Welker C. M.[Φ#], **Mendu V**., and Pang M.[Ψ], 2015, Functional evolutionary studies of a cotton fiber initiation transcription factor. 27th Annual Meeting Association for the Advancement of Industrial Crops (AAIC), October 18-22, Lubbock, Texas, USA.
43. Person, T.[Φ], Pang[Ψ], M. and **Mendu, V**. (2015) Expression profiling of cotton ghMYB25like gene A and D alleles using Arabidopsis as a model system. TTU Undergraduate Research Conference. Abstract ebook, p. 146.
44. Hendon, B.R.[##], C. Lowery, D.L. Auld[Ω], Burow, M., **Mendu V.**, Xu, W., and Ray, I.M. 2014. The Mutation Creation Station. ASA International Annual Meetings. Long Beach, CA. Nov. 2-5. p. 98.

**Service, Extension, and outreach (MSU):**

**A. University committees and Service (MSU)**

***Department of Plant Science and Plant Pathology:***

- *Guest lecture for BIOB105 on 09/27/23*
- *Founder and organizer of PSPP Journal club (2023-present)*
- *Conducted and presented at Winifred Asbjornson Plant Science (WAPS) Endowed Chair Advisory committee (only producer) meeting on 11/01/2023, Bozeman, MT.*
- *Conducted and presented at Winifred Asbjornson Plant Science (WAPS) Endowed Chair Advisory committee meeting on 06/29/2023, Havre, MT.*
- *Guest lecture for BIOB375 on 06/20/23*
- *Meeting with producer representatives of Winifred Asbjornson Plant Science (WAPS) advisory council (11/01/2022)*
- *Montana Agricultural Experimental Station (MAES) hatch proposal review committee member (2022)*
- *Guest lecture for BIOB375 on 06/16/22*
- *Conducted and presented at Winifred Asbjornson Plant Science (WAPS) Endowed Chair Advisory committee meeting-2 on 06/23/2022, Havre, MT.*
- *Strategic Planning Committee member (05/06/2022)*
- *Conducted Winifred Asbjornson Plant Science (WAPS) Endowed Chair Advisory committee meeting-1on 01/25/2022, Bozeman, MT.*
- *Attended donor appreciation dinner and interreacted with producers and donors for the endowment-02/23/2022.*
- *Graduate student trip to Great falls (State Grain Lab, MWBC, Grain Craft and Pasta Montana)-04/21/2022.*

***College of Agriculture:***

- *Served as a judge for LRES-PSPP graduate student symposium, Inspiration hall, MSU, Bozeman, MT, 04/18/2024, (https://www.montana.edu/calendar/events/50160).*
- *Participated in NWARC field day, Corvallis, MT, 07/27/2023.*
- *Attended and presented at NARC field day, 06/29/2023, Havre, MT.*
- *Attended and presented at SARC field day, Huntley, MT-06/14/2023.*
- *Presentation at Montana Grain Growers Association convention, Great falls, MT-11/01/2022*
- *Attended and presented research update to MAES advisory council,* Foundation seed building, Bozeman, MT-10/20/22
- *Attended and presented at NWARC field day, Creston, MT-07/14/2022.*
- *Attended and presented at field day, Sidney, MT-07/12/2022.*
- *Attended and presented at field day, Swank Farm, MT-07/11/2022.*
- *Attended field day as part of international barley symposium, Riga, Latvia, 07/07/2022.*
- *Attended and presented at field day, Havre, MT-06/23/2022.*

***Montana State university:***

- *Member of Montana State University planning council committee (2023-present)*

**B. Professional/educational/social service**

- *Reviewed proposal for NSF-NIFA-PBI (04/24/22-05/16/2023)*
- *Reviewed proposal for NSF-USDA (08/19/22-09/16/2022)*
- *Reviewed manuscript for Journal of Experimental Botany (05/03/2022).*
- Indian Student Organization (ISA) advisor (2022-present)

**C. Editorial service**

**1. Executive Editor:** Plant gene (2024-present)
**2. Associate editor**: Plant gene (2019-present)
**3. Associate editor**: Plant Biotechnology (specialty section of Frontiers in Bioengineering and Biotechnology and Frontiers in Plant Science. (2019-present)
**4. Editorial board member:** Frontiers in Plant Science (2024-present)
**5. Guest editor**: Plants special issue "Identification and Characterization of the Genes Involved in the Plant Cell Wall Biosynthesis and Regulation" (2022-present).

**Service, Extension, and outreach (TTU)**

**A. University committees and Service (TTU)**

***Department of Plant & Soil Sciences***

- Evaluation of George Tereshkovich Plant & Soil Science Outstanding Doctoral Graduate student award applications (04/09/2020)
- Guest lecture: PSS 1100, Freshmen and Transfer Student Seminar- (10/09/2019)
- Guest lecture: PSS1321-Agronomic Plant Science (27/09/2019)
- Guest lecture and lab session: PSS4415-Plant biotechnology (02/07/2019).
- Guest lecture: PSS 1100, Freshmen and Transfer Student Seminar- Fall, 2018
- Hosted PSS seminar by Dr. Enamul Huq, University of Texas, Austin, (11/16/2018)
- Hosted PSS seminar by Dr. Zhanguo Xin, USDA-ARS, Lubbock (09/20/2018)
- Hosted PSS seminar by Dr. Takato Imaizumi, University of Washington (04/06/2018)
- Guest lecture: PSS 5370, Texas International Cotton School-Fall, (08/07/2017)
- Evaluation of PSS 5100 Poster Sessions, TTU, 2013, 2014, 2015, 2016, 2017, 2018.
- Guest lecture: PSS 5370, Texas International Cotton School- Fall, (08/01/2016)
- Faculty search committee member (Plant genomics, 2014-2015)
- Cluster hire committee member: High Throughput Phenotyping (2014)
- Group leader of PSS Genetics/breeding curriculum development committee (2014-2021).
- Member of PSS Website committee (2014-2021).
- Member of PSS lab safety committee (2014-2021
- Faculty search committee member (Cotton and small grains breeder)-2015-2016
- Faculty search committee member (Molecular Stress Physiologist)-2015-2016
- Guest lecture: PSS 1100, Freshmen and Transfer Student Seminar- Fall, 2015
- Guest lecture: PSS 5370, Texas International Cotton School- Fall, (08/04/2015)
- Guest lecture: Cochran Fellow's from Pakistan on "Cotton fiber initiation and development"-Summer, 2015.

***College of Agricultural Sciences & Natural Resources (CASNR)***

- Guest lecture and lab session: ANSC 5001-Problems in Animal Science-Research Methods in Ruminant Nutrition-Summer, 2020.
- Committee member of "Associate Dean for Research" for the CASNR-2018.

- Guest lecture and lab session: ANSC 5001-Problems in Animal Science-Research Methods in Ruminant Nutrition-Summer, 2018.
- CASNR International activities member representing PSS department (2016-2021)
- Guest lecture and lab session: ANSC 5001-Problems in Animal Science-Research Methods in Ruminant Nutrition-Summer, 2015.
- Lab tours and meetings with visiting delegations and scientists
  - Mendu, V. Laboratory Tour and meeting with visitors from Brazil (Cotton Growers, Heads of the Mato Grosso Cotton Growers Association, students, and researchers), 09/07/2016.
  - Mendu, V. and de los Reyes B. Meeting with visitors from National Cotton Council, delegation from Africa and USDA-Foreign Agricultural Service, 08/28/2016.
  - Mendu V. and Auld, D.L. 2015. Laboratory Tour and meeting, Institute of Cotton Research team, 12/16/2015.
  - Federal liaison group (Lewis-Burke Associates) for Texas Tech University (2015).
  - Mendu V. and Auld, D.L. 2015. President and scientists from Institute of Cotton Research (ICR) of the Chinese Academy of Agricultural Sciences (CAAS), Beijing, China (2015).
  - Mendu V. and Auld, D.L. 2015. Laboratory Tour and meeting, Cotton Research Team-San Paulo State University. Texas Tech University. Lubbock, TX. 7/6/2015.
  - Mendu V. Laboratory Tour and meeting with Dr. Vanga Siva Reddy from International Center for Genetic Engineering and Biotechnology. India. 09/15/2014.
  - Mendu V. and Auld, D.L. 2015. Vice President and scientists from Huazhong Agricultural University (HZAU), Wuhan, China (2015).

***Texas Tech University***

- Graduate program review internal committee member-Department of Sociology, TTU. (2021)
- Guest lecture to BIOL4101-003/ BIOL6101-001 Bioinformatics User Group Series (BUGS)-Department of Biology (09/20/2019)
- Member of University Library Committee (2019-2021)
- Dean's representative for Ph.D. defense of graduate students
  1. Kellie J. L. Seals, Agricultural Education and Communication (06/15/21)
  2. Joel Dustin Sugg, Animal and Food Science (03/21/2019)
  3. Byron Buckley, Department of Natural Resource Management (03/20/2019)
  4. Maliha Tabassum Munir, Department of Nutritional Sciences (03/01/2019)
  5. Jennifer Smith, Biological Sciences (10/03/2018)
  6. Dhanamale Bandara, Department of Mathematics and Statistics (03/23/2018)
  7. Xunlu Zhu, Biological Sciences (05/10/2017)
  8. Mandana Pahlavani, Department of Nutritional Sciences (03/29/2017)
  9. Siroj Pokharel, Animal and Food Science (02/29/2016)
  10. Ratan Chopra, Plant & Soil Science (10/08/2014)
  11. Rajiv Rajbhandari, Plant & Soil Science (10/11/2013)
- Provided interview to TTU Ethics Center blog (10/24/2018)
- Representing TTU in Consortium for Advanced Bio economy Leadership Education (CABLE) program (https://bioproducts.osu.edu/cable).
- CASNR banner bearer for the undergraduate commencement ceremony (05/19/2018).

- Served as a Judge for the 17th Annual TTU Graduate Research Poster Competition (04/10/2018).
- Organized a seminar by Peanut Research Lab Director Dr. Dave Hoisington to benefit the faculty who are interested in proposal submission for funding (03/28/2018).
- Faculty mentor of Program in Inquiry and Investigation ($Pi^2$) - (2018-2021)
- CISER (Center for the Integration of STEM Education & Research) faculty mentor-(2017-2021)
- TTU-STEM core affiliate member (2017-2021)
- India taskforce committee member: CASNR representative for India taskforce for improving the international recruitment at TTU (2014-2021)
- Attended black convocation ceremony in support of graduating students (2015, 2016, 2017)
- Cluster hire committee member (2014):
  - Tackling the Phenome-Genome Challenge (with college of Arts & Sciences, TTU)
  - Molecular genetics of gene regulation: 'old school systems biology' (with college of Arts & Sciences, TTU)
- Mentored an undergraduate student (Taylor Person) in the University Innovation Fellows leadership program. Taylor represented PSS-CASNR in the TTU leadership circle-2015.
- Participation in Center for Active Learning & Undergraduate Engagement (CALUE). My undergraduate student presented in the TTU Undergraduate Research Conference. (Person, T.$^{\Phi}$, Pang$^{\Psi}$, M. and **Mendu, V**. (2015) Expression profiling of cotton ghMYB25like gene A and D alleles using Arabidopsis as a model system. Abstract ebook, p. 146).
- Attended and participated in discussions: Sultan Qaboos Cultural Center (SQCC) Conference in Agriculture and Arid Lands. Office of International Affairs and ICASALS, TTU, 11/06/2015.
- Evaluation of Graduate student fellowship applications, 02/12/2016.
- Lab tour of Karen Uetrecht, Agricultural specialist, USDA-FAS, Washington D.C. 02/28/2016.
- Lab lecture and experiment demonstration for Fuzhou Number 1 High School in China students (lecture and lab session) under TTU-iSTEM program. 07/20/2016.

**B. Community service (K-12 education)**

- Science project judge: The South Plains Regional Science and Engineering Fair, United Spirit Arena, February 14, 2014.
- Science project judge: The South Plains Regional Science and Engineering Fair, United Spirit Arena, February 13, 2015.
- Science project judge: Christ the King Cathedral School Science Fair, January 20, 2016, at CTK school, 4011 54$^{th}$ Street in Lubbock, Texas.
- Science project judge: Christ the King Cathedral School Science Fair, 1$^{st}$ February 2017, at CTK school, 4011 54$^{th}$ Street in Lubbock, Texas.
- Science project judge: Christ the King Cathedral School Science Fair, 30$^{th}$ January 2019, at CTK school, 4011 54$^{th}$ Street in Lubbock, Texas.
- Training Middle school students on science projects in coordination with **Dr. Alicea A. Chaloupka**, Ph.D., JH and HS Science Teacher, Christ the King Cathedral School, Lubbock, TX, 79413. (2015-2016).

**C. Professional and Honorary Society membership**

- Member of triple A (ASA, CSSA and SSSA) society (2023-present)
- Member of American Peanut Research and Education Society (APRES), (2016-2021)
- Founding member of American Society of Agronomists (ASA) community dedicated to cotton (2015-2021)
- Member of Gamma Sigma Delta, the Honor Society of Agriculture (2014-2021)
- American Society of Plant Biologist (2014-2021)
- Member of International Cotton Researchers Association (ICRA), 2013-2021

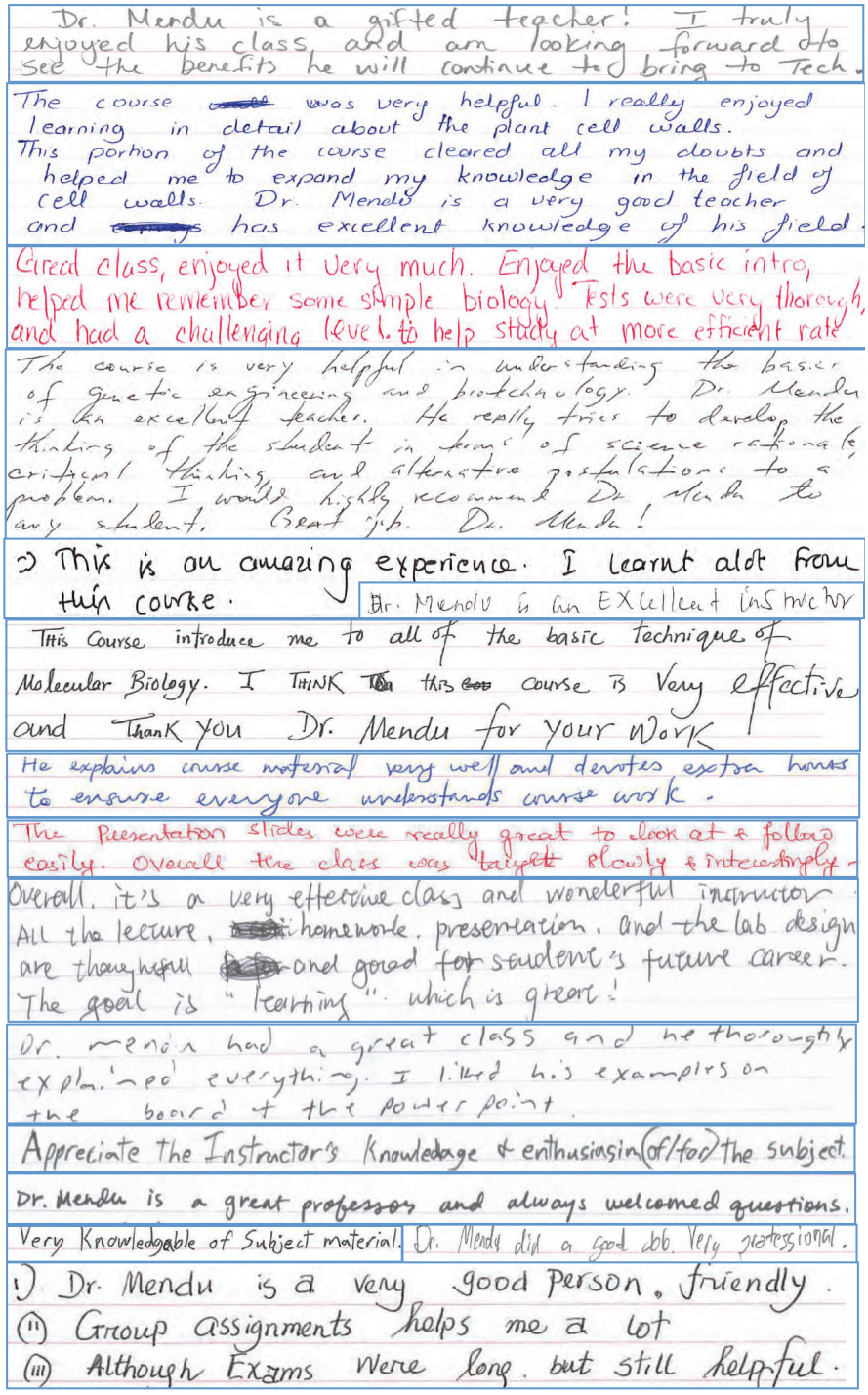
**D. Peer reviewing service**

Plant Physiology (1), BMC plant biology (2), The plant cell (1), Functional & Integrative Genomics (3), BMC genomics (1) Journal of cotton science (1), Molecular biotechnology (1), Acta Physiologiae Plantarum (1), Plant Molecular Biology (2), Industrial Crops and Products (2), Journal of Experimental Botany (1), Rice (1), Turkish Journal of Botany (1), Frontiers in Plant Science (2), Plant Biotechnology Journal (1), Indian Journal of Plant Physiology (1), Journal of Integrative Plant Biology (1), Theoretical and Applied Genetics (1), PLOSONE (1), Plants (1), Plant Molecular Biology(1), Plant Gene(1) Plant biotechnology(1), Genetica (1) and Crop Science (1).

**E. Education/Academic service:**

- Provided review on a book for publication by Elsevier (3/2/2021)
- Helped with phylogenetic analysis for a postdoc in Prof. Ewa Mellerowicz at Umeå Plant Science Centre Umeå, Sweden.
- Reviewed proposal for Kentucky Science and Engineering Foundation-2018
- Helped with data analysis for Dr. Seung H. Yang, Department of Biotechnology, Chonnam National University, Korea. Acknowledged in the published paper-Genome and Transcriptome-wide Analyses of Cellulose Synthase Gene Superfamily in Soybean, 2017.
- Proposal reviewer FFAR, Foundation For Food and Agricultural research (http://foundationfar.org/)-2017-present.
- Pre-submission review of manuscript "At*RAV1* and At*RAV2* overexpression in cotton increases fiber length differentially under drought stress and delays flowering" for Dr. Chris Rock, Dep. of Biology, TTU. Acknowledged in the paper-2014.
- Evaluation of Dr. Robert Wright's hatch-project "Bacterial Blight Resistance in Cotton", (Texas A&M University) Summer-2015.

**Selected student comments on my teaching/courses**



Dr. Mendu is a gifted teacher! I truly enjoyed his class, and am looking forward to see the benefits he will continue to bring to Tech.

The course ~~was~~ was very helpful. I really enjoyed learning in detail about the plant cell walls. This portion of the course cleared all my doubts and helped me to expand my knowledge in the field of cell walls. Dr. Mendu is a very good teacher and ~~has~~ has excellent knowledge of his field.

Great class, enjoyed it very much. Enjoyed the basic intro, helped me remember some simple biology. Tests were very thorough, and had a challenging level to help study at more efficient rate.

The course is very helpful in understanding the basics of genetic engineering and biotechnology. Dr. Mendu is an excellent teacher. He really tries to develop the thinking of the student in terms of science rationale, critical thinking and alternative postulations to a problem. I would highly recommend Dr. Mendu to any student. Great job. Dr. Mendu!

:) This is an amazing experience. I learnt alot from this course.

Dr. Mendu is an EXCellent instructor

This course introduce me to all of the basic techniques of Molecular Biology. I THINK ~~Tha~~ this ~~coo~~ course is very effective and Thank you Dr. Mendu for your work

He explains course material very well and devotes extra hours to ensure everyone understands course work.

The presentation slides were really great to look at & follow easily. Overall the class was taught slowly & interestingly.

Overall, it's a very effective class and wonderful instructor. All the lecture, ~~and~~ homework, presentation, and the lab design are thoughtful ~~and~~ and good for students's future career. The goal is "learning", which is great!

Dr. mendu had a great class and he thoroughly explained everything. I liked his examples on the board & the power point.

Appreciate the Instructor's Knowledge & enthusiasm(of/for) the subject.

Dr. Mendu is a great professor and always welcomed questions.

Very Knowledgable of Subject material. Dr. Mendu did a good job. Very professional.

i) Dr. Mendu is a very good person, friendly.
ii) Group assignments helps me a lot
iii) Although Exams were long, but still helpful.