

## CURRICULUM VITAE

Rosalyn B. Angeles-Shim  
Bayer Plant Science Building  
Department of Plant and Soil Sciences  
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### EDUCATIONAL BACKGROUND

*Doctor of Agricultural Sciences*; February 2008-March 2011  
Nagoya University, Furo-cho, Nagoya, Aichi, Japan  
PhD Dissertation: Exploring the important agronomic trait loci of *Oryza glaberrima*

*Master of Science in Genetics (Minor in Plant Breeding)*; June 2005-January 2008  
University of the Philippines, Los Baños, Laguna, Philippines  
MS Thesis: Varietal classification of rice (*Oryza sativa* L.) by oligomer hybridization to genomic DNA arrays

*Bachelor of Science in Biology (Major in Genetics)*; June 1995-March 1999  
University of the Philippines, Los Baños, Laguna, Philippines  
BS Thesis: Morphological, cytological and molecular analyses of interspecific hybrid of rice *Oryza sativa* L. (cv. IR56) x *O. brachyantha* (Acc 101232)

### PROFESSIONAL EXPERIENCE

1 Apr 2017-present                      *Assistant Professor of Plant Breeding and Genetics*  
Department of Plant and Soil Science  
Texas Tech University, Lubbock, Texas 79409, USA

1 Apr 2013- 31 Mar 2017                *Assistant Professor*  
Laboratory of Plant Molecular Biosystem,  
Bioscience and Biotechnology Center,  
Nagoya University, Furo-cho, Nagoya, Aichi, Japan 464-8601  
(deployed as a *Visiting Research Fellow* at the Novel Gene Resources  
Laboratory, Plant Breeding, Genetics and Biotechnology Division,  
International Rice Research Institute, Los Baños, Laguna, Philippines)

1 Aug 2012-31 Mar 2013                *Postdoctoral Fellow*  
Laboratory of Plant Molecular Biosystem,  
Bioscience and Biotechnology Center  
Nagoya University, Nagoya, Aichi, Japan 464-8601  
(deployed as a *Visiting Research Fellow* at the Novel Gene Resources  
Laboratory, Plant Breeding, Genetics and Biotechnology Division,  
International Rice Research Institute, Los Baños, Laguna, Philippines)

5 Oct 2011-5 Jul 2012                 *Japan International Cooperation Agency (JICA) Consultant*  
(deployed as a *Visiting Research Fellow* at the Wide Hybridization  
Laboratory, Plant Breeding, Genetics and Biotechnology Division  
International Rice Research Institute, Los Baños, Laguna, Philippines)

1 Apr 2011-31 Sept 2011                *Postdoctoral Fellow*  
Laboratory of Plant Molecular Biosystem,  
Bioscience and Biotechnology Center  
Nagoya University, Nagoya, Aichi, Japan

Apr 2008-Mar 2011                      *Research Assistant*  
Laboratory of Plant Molecular Biosystem,  
Bioscience and Biotechnology Center  
Nagoya University, Nagoya, Aichi, Japan 464-8601

1 Aug -31 Dec 2007                      *Assistant Scientist*  
T.T. Chang Genetic Resources Center

3 Jan 2001-31 Jul 2007 International Rice Research Institute, Los Baños, Laguna, Philippines  
*Editor*  
 Plant Sciences Team, CAB International Project  
 Information Analyst Corporation, 3/F Exchange Corner Building,  
 Rufino cor. Bolanos Street, Makati City, Philippines

1 Sep 1999-31 Dec 2000 *University Research Associate*  
 Institute of Plant Breeding, College of Agriculture  
 University of the Philippines, Los Baños, Laguna, Philippines

#### SCIENTIFIC AND ACADEMIC AWARDS

1 Jan 2017-31 Dec 2019 *Honorary Scientist and Advisor on Agricultural Science and Technology*  
 Rural Development Administration, South Korea

1 Apr 2008-31 Mar 2011 *Recipient, Nagoya University Global Center of Excellence Scholarship*  
 School of Agricultural Sciences, Nagoya University, Japan

Jun 2005-Dec 2008 *Affiliate MS Thesis Research Scholar*  
 T.T. Chang Genetic Resources Center,  
 International Rice Research Institute, Los Baños, Laguna, Philippines

#### MEMBERSHIP IN PROFESSIONAL AND ACADEMIC ORGANIZATIONS

National Association of Plant Breeders (NAPB), (*Member, 2018-present; Membership Committee (2018-2019)*)  
 Crop Science Society of America (CSSA), *Member (2018-present)*  
 American Society of Agronomy (ASA), *Member (2018-present)*  
 Philippine Society for the Advancement of Genetics (PhilSAGEN), *Member (2014-present)*  
 Crop Science Society of the Philippines (CSSP), *Member (2015-present)*

#### SCIENTIFIC AND TECHNICAL PUBLICATIONS (\*corresponding author, <sup>1</sup>graduate student)

##### A. Original Research Papers

1. **Angeles-Shim RB\***, Reyes VP<sup>1</sup>, Del Valle MM, Sunohara H, Shim J, Lapis RS, Jena KK, Ashikari M, Doi K (2018) Marker-assisted introgression of the quantitative resistance gene pi21 confers broad-spectrum resistance of rice to blast. *Rice Sci*, *In press*
2. Shim J, Mangat PK<sup>1</sup>, **Angeles-Shim RB\*** (2018) Natural variation in wild *Gossypium* species as a tool to broaden the genetic base of cultivated cotton. *J Plant Sci Curr Res* 2:005.
3. Bessho-Uehara K, Nugroho J, Kondo H, **Angeles-Shim RB**, Ashikari M (2018) Sucrose affects the negative gravitropic growth of the rhizomes in *Oryza longistaminata*. *J Plant Res*, <https://doi.org/10.1007/s10265-018-1033-x>.
4. Bessho-Uehara K, Furuta T, Masuda K, Yamada S, **Angeles-Shim RB**, Ashikari M, Takashi T (2017) Construction of rice chromosome segment substitution lines harboring *Oryza barthii* genome and evaluation of yield-related traits. *Breed Sci* 67(4):408-415. doi:10.1270/jsbbs.17022.
5. Furuta T, Uehara K, **Angeles-Shim RB**, Shim J, Nagai K, Ashikari M, Takashi T (2016) Development of chromosome segment substitution lines (CSSLs) harboring *O. nivara* segments and evaluation of yield-related traits. *Breed Sci* 66(5):845-850. doi:10.1270/jsbbs.16131.
6. Bessho-Uehara K, Wang DR, Furuta T, Minami A, Nagai K, Gamuyao R, Asano K, **Angeles-Shim RB**, Shimizu Y, Ayano M, Komeda N, Doi K, Miura K, Toda Y, Kinoshita T, Okuda S, Higashiyama T, Nomoto M, Tada Y, Shinohara H, Matsubayashi Y, Greenberg A, Wu J, Yasui H, Yoshimura A, Mori H, McCouch SR, Ashikari M (2016) Loss of function at RAE2, a novel EFPL, is required for awnlessness in cultivated Asian rice. *Proc Natl Acad Sci USA* 113(32):8969-8974.
7. Ramos JM, Furuta T, Uehara K, Niwa C, **Angeles-Shim RB**, Shim J, Brar DS, Ashikari M, Jena KK (2016) Development and evaluation of chromosome segment substitution lines (CSSLs) of *Oryza longistaminata* A. Chev. & Röhr in the background of the elite *japonica* cultivar, Taichung 65. *Euphytica*. doi 10.1007/s10681-016-1685-3.

8. Kurokawa Y, Noda T, **Angeles-Shim RB**, Uehara K, Yamagata Y, Nagai K, Yasui H, Yoshimura A, Jena KK, Ashikari M, Doi K (2015) Construction of versatile SNP array for pyramiding useful gene of rice. *Plant Sci* 242:131-139. doi.org/10.1016/j.plantsci.2015.09.008.
  9. Furuta T, Komeda N, Asano K, Uehara K, Gamuyao R, **Angeles-Shim RB**, Nagai K, Doi K, Wang DR, Yasui H, Yoshimura A, Wu J, McCouch SR, Ashikari M (2015) Convergent loss of awn in two cultivated rice species *Oryza sativa* and *Oryza glaberrima* is caused by mutations in different loci. *G3: Genes, Genomes and Genet* 5(11):2267-2274, doi:10.1534/g3.115.020834.
  10. Shim J, Torollo G, **Angeles-Shim RB**, Cabunagan RC, Choi I, Yeo U, Ha W (2015) Improvement of photoperiod-insensitive japonica rice cultivars for resistance to Rice tungro spherical virus by marker-assisted selection. *Breed Sci* 65:345-351. doi:10.1270/jsbbs.65.345.
  11. **Angeles-Shim RB**, Verdeprado MDA, Gibe GG, Lapis RS, Jena KK, Ashikari M (2015) Introgression of major QTLs for increased primary branching and grain number in select rice varieties by marker-assisted backcrossing. *Proceedings of the 23<sup>rd</sup> FCSSP Scientific Conference In: The Philippine Journal of Crop Science Vol 40 Supplement 1: p 88.*
  12. Nagai K, Kondo Y, Kitaoka T, Noda T, Kuroha T, **Angeles-Shim RB**, Yasui H, Yoshimura A, Ashikari M (2014) QTL analysis of internode elongation in response to GA in deepwater rice. *AoB Plants* 6: plu028. doi:10.1093/aobpla/plu028.
  13. **Angeles-Shim RB**, Vinarao RB, Balram M, Jena, KK (2014) Molecular analysis of *Oryza latifolia* Desv.-derived introgression lines and identification of value-added traits for rice (*O. sativa* L.) improvement. *J Hered* 105(5):676-689. doi:10.1093/jhered/esu032.
  14. Ayano M, Takahiro K, Sakakibara H, Kitaoka T, Kuroha T, **Angeles-Shim RB**, Kitano H, Nagai K, Ashikari M (2014) Gibberellin biosynthesis and signal transduction is essential for internode elongation in deepwater rice. *Plant Cell and Environ* 37(10):2313-2324. doi:10.1111/pce.12377.
  15. Furuta T, Uehara K, **Angeles-Shim RB**, Shim J, Ashikari M, Takashi T (2014) Development and evaluation of chromosome segment substitution lines (CSSLs) derived from *Oryza rufipogon* in the genetic background of *O. sativa* L. *Breed Sci* 63:468-475.
  16. **Angeles-Shim RB**, Asano K, Takashi T, Shim J, Kuroha T, Ayano M, Ashikari M (2012) A WUSCHEL-related homeobox 3B gene, depilous (dep), confers glabrousness of rice leaves and glumes. *Rice* 5:28; doi:10.1186/1939-8433-5-28.
  17. Nagai K, Kuroha T, Ayano M, Kurokawa Y, **Angeles-Shim RB**, Kawano R, Shim J, Yoshimura A, Ashikari M (2012) Two novel QTLs regulate internode elongation of deepwater rice in the early vegetative stage. *Breed Sci* 62:178-185.
  18. **Shim RA**, Ashikari M, Angeles ER, Takashi T (2010) Development and evaluation of *Oryza glaberrima* Steud chromosome segment substitution lines in the background of *O. sativa* subsp. *japonica* cv. Koshihikari. *Breed Sci* 60:613-619.
  19. Asano K, Hirano K, Ueguchi-Tanaka M, **Angeles-Shim RB**, Komura T, Satoh H, Kitano H, Matsuoka M, Ashikari M (2009) Isolation and characterization of dominant dwarf mutants, Slr1-d in rice. *Mol Genet Genomics* 281(2):223-31.
  20. Hirano K, Aya K, Hobo T, Sakakibara H, Kojima M, **Angeles-Shim RB**, Hasegawa Y, Ueguchi-Tanaka M, Matsuoka M (2008) Comprehensive transcriptome analysis of phytohormone biosynthesis and signaling genes in microspore/pollen and tapetum of rice. *Plant and Cell Physiol* 49 (10):1429-1450.
- B. Book Chapters (career total:2)
1. Nagai K, Hirano K, **Angeles-Shim RB**, Ashikari M (2018) Breeding applications and molecular basis of semi-dwarfism in rice In: Sasaki, T. and Ashikari, M. (Eds) *Rice Genetics, Genomics and Breeding*. Springer Nature Singapore Pte Ltd. Singapore, pp 556 (ISBN 978-981-10-7460-8).
  2. **Angeles-Shim RB**, Ashikari M (2017) Advances in molecular breeding techniques for rice In: Sasaki T. (Ed) *Achieving sustainable cultivation of rice Volume 1: Breeding for higher yield and quality*. Burleigh Dodds Science Publishing, Cambridge, UK, 22 May 2017 pp 298 (ISBN:978 1-78676 024 1; www.bdspublishing.com)

## C. Technical Reports

1. Wonder Rice Initiative for Food Security and Health (WISH) Project Annual Report FY2014 (April 2014-March 2015); Nagoya University, Nagoya and the Japan International Cooperation Agency, Tokyo, Japan
2. Wonder Rice Initiative for Food Security and Health (WISH) Project Annual Report FY2015 (April 2015-March 2016); Nagoya University, Nagoya and the Japan International Cooperation Agency, Tokyo, Japan
3. Wonder Rice Initiative for Food Security and Health (WISH) Project Annual Report FY2016 (April 2016-March 2017); Nagoya University, Nagoya and the Japan International Cooperation Agency, Tokyo, Japan

## SCIENTIFIC AND TECHNICAL ABSTRACTS/PRESENTATIONS

### A. Conferences/Symposium (<sup>1</sup>graduate student)

1. Sanchez J<sup>1</sup>, de los Reyes B, Emendack YY, Ritchie GB, **Shim RA**, Hayes CM. Phenotypic assessment of seedling cold tolerance in *Sorghum biolor* (L.) Moench: Application of a variable temperature regime. Plant and Animal Genome Conference XXVII, San Diego, USA, 12-16 January 2019.
2. Gannaban RB<sup>1</sup>, Shim J, de los Reyes BG, **Angeles-Shim RB**. Genetic diversity analysis of cotton germplasm for cold tolerance improvement. Plant and Animal Genome Conference XXVII, San Diego, USA, 12-16 January 2019.
3. Mangat PK<sup>1</sup>, Gannaban RB, **Angeles-Shim RB**. Analysis of genome sequence of the nightshade species, *Solanum lycopersicoides*. Plant and Animal Genome Conference XXVII, San Diego, USA, 12-16 January 2019.
4. Vinarao RB, Shim J, Lapis RS, **Angeles-Shim RB**. Mapping of a novel gene conferring bacterial blight resistance in the wild allotetraploid rice *Oryza latifolia* Desv. Enhancing Productivity in a Changing Climate, 2018 ASA and CSSA Meeting, Baltimore, Maryland, USA 4-7 November 2018. [5-minute rapid presentation; Poster-presenter]
5. Singleton JJ<sup>1</sup>, Gannaban RB<sup>1</sup>, de los Reyes BG, **Angeles-Shim RB**. Evaluation of cotton germplasm for germination and seedling vigor under low temperature stress. Enhancing Productivity in a Changing Climate, 2018 ASA and CSSA Meeting, Baltimore, Maryland, USA 4-7 November 2018.
6. Mangat PK<sup>1</sup>, Gannaban RB<sup>1</sup>, **Angeles-Shim RB**. Molecular characterization of disomics derived from *Solanum lycopersicoides* monosomic alien addition lines in the genetic background of tomato (*Lycopersicon esculentum*). Enhancing Productivity in a Changing Climate, 2018 ASA and CSSA Meeting, Baltimore, Maryland, USA 4-7 November 2018.
7. **Angeles-Shim RB**, Reyes VP<sup>1</sup>, Del Valle MM, Lapis RS, Shim J, Jena KK, Ashikari M, Doi K. Introgression of *pi21* by marker-assisted backcrossing confers resistance to a wider range of Philippine blast isolates of select rice varieties. Plant and Animal Genome Conference XXVI, San Diego, USA, 13-17 January 2018. [Poster presenter]
8. **Angeles-Shim RB**, Del Valle MM, Lapis RS, Reyes VP<sup>1</sup>, Shim J, Jena KK, Doi K, Ashikari M. Introgression of the quantitative blast resistance gene *pi21*, on select rice varieties by marker-assisted backcrossing. 14<sup>th</sup> International Symposium on Rice Functional Genomics, Suwon, Korea, 25-28 September 2017. [Poster presenter]
9. Makihara D, Samejima H, Kikuta M, Kimani JM, Ashikari M, **Angeles-Shim RB**, Sunohara H, Jena KK, Yamauchi A, Doi K. Evaluation of lines of NERICA 1 introgressed with *Gn1a* and *WFP* for yield and yield components as affected by nitrogen fertilization in Kenya. 9<sup>th</sup> Asian Crop Science Association Conference, Jeju, South Korea, 5-7 June 2017. [Poster co-author]
10. Furuta T, Reuscher S, Kondo H, Uehara K, **Angeles-Shim RB**, Doi K, Ashikari M. QTL study of rhizomatousness in rice using GBS and Bayesian QTL mapping. The 131<sup>st</sup> Meeting of the Japan Breeding Society, Aichi, Japan March 2017. [Poster co-author]
11. Bessho-Uehara K, Wang DR, Furuta T, Minami A, Nagai K, Gamuyao R, Asano K, **Angeles-Shim RB**, Shimizu Y, Ayano M, Komeda N, Doi K, Miura K, Greenberg A, Wu JZ, Yasui H, Yoshimura A, Mori H, McCouch SR, Ashikari M. Variation in cysteine residue number in REGULATOR OF AWN

- ELONGATION 2, a novel EPFL gene, leads to awnlessness in rice. Cold Spring Harbor Asia Conference, Awaji, Japan, 29 November – 2 December 2016. [Poster co-author]
12. **Angeles-Shim RB**, Vinarao RB, Vera Cruz CM, Jena KK. A novel gene for bacterial blight resistance from the wild rice species *Oryza latifolia* desv. 5<sup>th</sup> International Conference on Bacterial Blight of Rice, Rice bacterial blight: New innovations for the Second Green Revolution, Bellevue Manila, Metro Manila, Philippines, 17-19 October 2016. [Poster presenter, **Best Poster Award**]
  13. Furuta T, Reuscher S, Kondo H, Uehara K, **Angeles-Shim RB**, Doi K, Ashikari M. GBS and rhizogenesis QTL analysis in wild rice *Oryza longistaminata*. The 80<sup>th</sup> Convention of the Japanese Society of Botany, Okinawa, Japan, 16 September 2016. [Poster co-author]
  14. **Angeles-Shim RB**, Verdeprado MDA, Gibe GG, Lapis RS, Jena KK, Ashikari M. Introgression of major QTLs for increased primary branching and grain number in select rice varieties by marker-assisted backcrossing. 23<sup>rd</sup> Federation of Crop Science Society of the Philippines Scientific Conference, Clark Freeport, Pampanga, Philippines, 11-16 May 2015. [Poster presenter]
  15. Furuta T, Reuscher S, Uehara K, **Angeles-Shim RB**, Kondo H, Doi K, Ashikari M. Genetic approach toward unraveling rhizome formation in Rice. International symposium "Towards increased plant productivity through understanding of environmental responses and epigenetic regulation" RIKEN, Yokohama, Japan, 24-25 November 2015. [Poster co-author]
  16. Furuta T, Reuscher S, **Angeles-Shim RB**, Uehara K, Kondo H, Doi K, Ashikari M. QTL analysis for rhizome formation loci using genotyping-by-sequencing on F2 population from the cross between *Oryza sativa* and *Oryza longistaminata* International ERATO Higashiyama Live-Holonics Symposium & Technical Workshop 2015, Nagoya, Japan, 27 August 2015. [Poster co-author]
  17. **Angeles-Shim RB**, Vinarao RB, Marathi B, Jena KK. Molecular analysis of *Oryza latifolia* Desv. (CCDD genome)-derived introgression lines and identification of value-added traits for rice (*O. sativa* Linn.) improvement. 41<sup>st</sup> Annual Convention of the Philippine Society for Biotechnology and Molecular Biology, Cebu, Philippines, 4-5 December 2014. [Concurrent Lecture Speaker; Judge in the Young Scientist Forum; Judge for Best Poster in the Agri-Aqua Category]
  18. **Angeles-Shim RB**, Verdeprado MDA, Gibe GG, Lapis RS, Jena KK, Ashikari M. Precision breeding for increased number of primary branching and grain number in select rice varieties using marker-assisted backcrossing. 14<sup>th</sup> National Genetics Symposium, Southeast Asian Fisheries Development Center, Tigbauan, Iloilo, Philippines, 27-29 November 2014. [Poster presenter; Judge in the Undergraduate Thesis Competition]
  19. **Angeles-Shim RB**, Asano K, Takashi T, Shim J, Kuroha T, Ayano M, Ashikari M. A WUSCHEL-related homeobox 3B gene, *depilous* (*dep*), confers glabrousness of rice leaves and glumes. 40<sup>th</sup> Annual Convention of the Philippine Society for Biotechnology and Molecular Biology, DLSU-Manila, Taft Avenue, Philippines, 4-5 December 2014 [Concurrent Session Speaker]
  20. **Angeles-Shim RB**, Vinarao RB, Quilloy NM, Malabanan RM, Balram M, Jena KK. (2013) Molecular characterization of disomic lines derived from *Oryza latifolia* Desv. monosomic alien addition lines in the background of the elite *O. sativa* breeding line IR31917-54-3-2. 7<sup>th</sup> International Rice Genetics Symposium, Manila, Philippines, 5-8 November 2013. [Poster presenter]
  21. Shim J, Torollo G, **Angeles-Shim RB**, Choi I, Cabunagan RC, Yeo U, Ha W. Development of RTD-resistant, elite tropical japonica cultivar by marker-assisted selection for RTSV resistance and photoperiod insensitivity selection. 7<sup>th</sup> International Rice Genetics Symposium, Manila, Philippines, 5-8 November 2013. [Poster co-author]
  22. **Angeles-Shim RB**, Asano K, Takashi T, Shim J, Kitano H, Ashikari M. Positional cloning of the gene that conditions glabrousness in rice using *Oryza glaberrima* chromosome segment substitution lines in *O. sativa* subsp. *japonica* cv. Koshihikari background. 4<sup>th</sup> Nagoya University Global COE Retreat, Toyohashi, Aichi, Japan, 13-14 September 2010. [Poster presenter]
  23. **Angeles-Shim RB**, Asano K, Takashi T, Shim J, Kitano H, Ashikari M. Mapping of the glabrous gene in rice using CSSLs derived from the cross *Oryza sativa* subsp. *japonica* cv. Koshihikari x *O. glaberrima*. 6<sup>th</sup> International Rice Genetics Symposium, Manila, Philippines, 16-19 November 2009. [Poster presenter]

24. Systems Biology for the Young Scientists: 1<sup>st</sup> GCOE International Symposium: Nagoya University, Furocho, Nagoya, Aichi, Japan, 2-3 December 2008 [Organizing Committee Member; Convenor]
25. **Angeles RB**, Aquino C, Juliano A, Macatangay M, McNally KL. Development of oligomeric hybridization to genomic DNA arrays for varietal classification of rice. 5th International Rice Genetics Symposium, Manila, Philippines 19-23 November 2005. [Poster presenter]

#### B. Invited Lectures/Seminars

1. **Angeles-Shim RB**. Precision breeding in rice for increased yield and improved biotic stress resistance by marker-assisted backcrossing. Invited seminar presented at the Junbok University in Jeonju, South Korea, 22 September 2017. [Guest Speaker]
2. **Angeles-Shim RB**. Precision breeding in rice for increased yield and improved biotic stress resistance by marker-assisted backcrossing. Seminar presented at the Philippine Rice Research Institute, PhilRice Central Experiment Station, Maligaya, Munoz, Nueva Ecija, Philippines, 27 January 2017. [Guest Speaker]
3. **Angeles-Shim RB**. Precision breeding in rice for increased yield and improved biotic stress resistance by marker-assisted backcrossing. Seminar presented at the National Institute of Agricultural Science, Rural Development Administration, Jeonju, South Korea, 22 December 2016. [Guest Speaker]
4. **Angeles-Shim RB**. Precision breeding in rice for increased yield and improved biotic stress resistance by marker-assisted backcrossing. Seminar presented at the National Institute of Agricultural Science, Rural Development Administration, Milyang, South Korea, 20 December 2016. [Guest Speaker]
5. **Angeles-Shim RB**. Precision breeding for increased yields and improved biotic stress resistance in rice. Presented during the 6<sup>th</sup> General Meeting of the Coalition for African Rice Development. Accra, Ghana, 17-19 November 2015. [Guest Speaker]
6. **Angeles-Shim RB**. Breeding for increased number of primary branching and grain number in select rice varieties using marker-assisted backcrossing. Lecture presented during the Molecular Breeding Course 2015. International Rice Research Institute, Los Banos, Laguna, Philippines, 28 September-9 October 2015. [Resource Speaker]
7. **Angeles-Shim RB**. WISH for Africa. Lecture presented during the Rice Breeding Course 2015. International Rice Research Institute, Los Banos, Laguna, Philippines, 16-27 March 2015. [Resource Speaker]
8. **Angeles-Shim RB**. Designing the rice genome to increase productivity and secure the world food supply. Laboratory Seminar for Incoming Freshmen. Laboratory of Plant Molecular Biosystem, Bioscience and Biotechnology Center, Nagoya University, Nagoya, Aichi Japan, 13 June 2014. [Resource Speaker]
9. **Angeles-Shim RB**. Exploring the important agronomic traits loci of *Oryza glaberrima*. Biology Lecture Series for SCIMATB. Yuchengco Auditorium, De La Salle University, Taft Avenue, Manila, Philippines, 8 March 2013 [Guest Speaker]

## GRANTSMANSHIP

### 2018

#### Federal grant applications

1. AFRI Foundational, USDA/NIFA (US\$ 209,908; pending)  
Project title: Systematic characterization of *Solanum lycopersicoides*-derived prebred derivatives to strengthen introgressive breeding capacity in tomato  
Role: Principal Investigator
2. AFRI Foundational, USDA/NIFA (US\$ 149,025; pending)  
Project title: Understanding the roles of genetic variation and phenotypic plasticity in the adaptive success of *Solanum elaeagnifolium* under abiotic stress  
Role: Principal Investigator
3. Norman E. Borlaug International Agricultural Science and Technology Fellowship Program (US\$ 47,705; unfunded)  
Project Title: Rice breeding for a new high-yield variety resistant to disease and humid conditions  
Role: Mentor to a Borlaug Fellow from Malaysia admitted to the program.

4. USAID Feed the Future Innovation Laboratory for Peanut (US\$ 2.25 million; unfunded)  
Project title: Establishing a high-resolution reference panel for the tetraploid cultivated peanut using a subset of iconic breeding donors: Foundations for gene discovery, allele mining, and genomics-assisted breeding for the peanut research community  
Role: Co- Principal Investigator
5. NSF/USDA (US\$ 300,000; unfunded)  
Project title: Enabling sorghum double haploid technology via reverse genetics and translational genomic studies of putative *sorghum bicolor* matrilineal (*SbMTL*) gene orthologue  
Role: Co-Principal Investigator

Non-federal grant applications

1. Texas State Support Committee (US\$ 20,000; funded)  
Project Title: Effects of early season planting and soil physical environment on the growth, development and yield of cotton germplasm with cold germination ability  
Role: Co-Principal Investigator
2. Cotton Inc (US\$ 32,000; funded)  
Project Title: Novel sources of seedling cold tolerance and vigor traits in cotton: Identification, characterization and use in marker-assisted breeding (Year 2)  
Role: Principal Investigator
3. Office of Research and Innovation, Proposal Assistance Program (US\$ 4,000; funded)  
Mapping the genomic landscape of introgression lines derived from *Solanum lycopersicoides*  
Role: Principal Investigator
4. Project Revolution (US\$ 180,000; funded)  
Project title: Understanding the genetic basis of phenotypic variation in fuzz fiber development in upland cotton  
Role: Co-Principal Investigator

**2017**

Federal grant applications

1. AFRI Foundational USDA/NIFA (US\$ 131,359; unfunded)  
Project Title: Molecular characterization of gene(s) conditioning the naked seed phenotype in cotton towards enhancing the breeding capacity for the trait.  
Role: Principal Investigator

Non-federal grant applications

1. Cotton Inc (US\$ 25,000; funded; awarded January 2018)  
Project Title: Novel sources of seedling cold tolerance and vigor traits in cotton: Identification, characterization and use in marker-assisted breeding  
Role: Principal Investigator
2. Cotton Inc (pre-proposal; unfunded)  
Project title: Broadening the genetic base of cultivated cotton for resistance to *Verticillium* wilt  
Role: Co-Principal Investigator
3. Cotton Inc (pre-proposal; unfunded)  
Project title: Evaluation of the potential of naked seed mutants as a genetic resource to enhance the within sample distribution of fiber length and improve ginning efficiency in cotton  
Role: Co-Principal Investigator
4. Project Revolution (US\$ 180,000; unfunded)  
Project title: Understanding the genetic basis of phenotypic variation in fuzz fiber development in upland cotton  
Role: Co-Principal Investigator
5. The CH Foundation (US\$ 7,200; unfunded)  
Project title: The CH Foundation Student Research Symposium  
Role: Principal Investigator

## STUDENT ADVISING/MENTORING

### Undergraduate students

1. Bednardz, Cade (Freshman; Fall 2017-present)
2. Dillard, Tatum (Spring 2018)
3. Lafferty, Haynes (Sophomore; Fall 2017-present)
4. Lamphear, Sydney (Freshman; starting Fall 2018)
5. Long, Macy (Junior; starting Fall 2018)
6. Riedt, Kyley (Fall 2017-present)
7. Steadman, James (Sophomore; starting Fall 2018)
8. Waltrip, Tanner (Freshman; starting Fall 2018)
9. Ware, Savana (Sophomore; Spring 2018-present)
10. Welch, Brade (Junior; starting Fall 2018)

### Graduate students (Texas Tech University [TTU] and University of the Philippines [UPLB])

<i>Committee Chair</i>	Gannaban, Ritchel B. (MS Plant and Soil Science; Fall 2017-present, TTU) Kelly, Caroline M. (MS Plant and Soil Science; Spring 2019-present, TTU) Mangat, Puneet Kaur (MS Plant and Soil Science; Fall 2017-present, TTU) Martinez, Guadalupe (MS Plant and Soil Science, Fall 2018-present; TTU) Singleton, Joshua (MS Plant and Soil Science; Fall 2017-present; TTU) Petitti, Margo (MS Plant and Soil Science (distance); Fall 2018-present; TTU) Wright, Dannie (MS Plant and Soil Science (distance); Spring 2018-present; TTU) Reyes, Vincent P. (MS Genetics; UPLB; <b>graduated May 2018</b> )
<i>Committee Co-chair</i>	Belo, Oluwatobi (PhD Plant and Soil Science, Fall 2018-present; TTU)
<i>Committee Member</i>	Gendron, Jake (MS, Plant and Soil Science, TTU, <b>graduated Fall 2018</b> ) Hinds, Zach (PhD, Fiber and Biopolymer Research; Summer 2017-present, TTU) Pabuayon, Isaiah (PhD, Plant and Soil Science; Summer 2017-present, TTU) Pendergrass, Jay (MS, Plant and Soil Science, Spring 2018-present, TTU) Sanchez, Jacobo (PhD, Plant and Soil Science, Fall 2017-present, TTU)

## TEACHING RESPONSIBILITIES

1. PSS4321: Fundamental Principles of Plant Breeding (Spring odd; 3 credits; 100% responsibility)
2. PSS3324: Seed Science (Spring even; 3 credits; 100% responsibility)
3. PSS6001 (Fall 2018): Selected Topic in Plant and Soil Science **‘Methods and concepts in quantifying plant responses to low temperature stress’**
4. PSS6001 (Spring 2019): Selected Topic in Plant and Soil Science **‘Practical exercises towards understanding dormancy and germination traits in seeds’**
5. PSS6000: Master’s Thesis
6. PSS7000: Research

## SYNERGISTIC AND INTERNATIONAL ACTIVITIES

1. *Honorary Scientist and Advisor on Agricultural Science and Technology*, Rural Development Administration, South Korea (January 1, 2017 to December 31, 2019)
2. *Visiting Assistant Professor* at University of the Philippines, Los Baños, Laguna (September 13, 2017 to July 31, 2018)
3. *Academic Editor* for PLoSOne (July 2018-present)
4. *Guest Editor* for PlosOne (May 2018)
5. *Guest Academic Editor* for the Special Issue of Agriculture: "Utilization of Wild and Exotic Germplasm for Crop Improvement" (July 2018-May 2019)
6. *Reviewer* for Theoretical and Applied Genetics, Rice, Rice Science, Breeding Science, Molecular Biotechnology, Genes, Molecular Breeding, PlosOne, Agronomy, International Journal of Molecular Sciences, and Environmental Analysis and Ecology Studies

## OTHER ACTIVITIES

1. Serves as *Mentor* under the MentorTech program of the Texas Tech University (FY2017-present)



2. Served as a *Member* of the Search Committee for the Rockwell Endowed Associate Professor/Professor of Horticulture (2 searches; January 2018-January 2019)
3. *Member* of the Department of Plant and Soil Science Graduate Students Committee and Undergraduate Research Committee (FY2017-present)
4. Served as a *Member* of the Search Committee Professor/Associate Professor/Professor of Ecological Modelling, Plant Ecohydrology and Quantitative Plant Ecology (June-September 2017)
5. Served as a guest lecturer in PSS 2316 (Sustainable Agriculture) on the '*Role of Plant Breeding in Sustainable Agriculture*' (October 30, 2018)
6. Served as *Dean's Representative* during the thesis defense of PhD candidate Anh Bui ('Understanding the molecular mechanism of cotton fiber initiation') on October 6, 2017.