

**Vitae:** William Bryan Terzaghi

**Personal Information**

Address: Dept Biology  
Wilkes University  
Wilkes-Barre, PA 18766

Phone: (570) 408-4762  
Fax: (570) 408-7862  
email: terzaghi@wilkes.edu

**Professional Experience**

2008-present Professor  
Department Biology  
Wilkes University

Jan- August 2007 Visiting Associate Professor  
Dept Molecular, Cellular and Developmental Biology  
Yale University

2001-2008 Associate Professor  
Department Biology  
Wilkes University

1995 -2001 Assistant Professor  
Department Biology  
Wilkes University

**Training:**

Post-doctoral: 1988 - 1995 University of Pennsylvania, Plant Science Institute  
Dr AR Cashmore, supervisor

1986 - 1988 Carnegie Institution of Washington, Dept Plant Biology  
Dr CB Field, supervisor

Graduate: 1980 - 1986 University of Utah, Dept Biological Sciences  
PhD in Plant Cell Biology, August, 1986  
Dr KG Lark, supervisor

Undergraduate: 1977 - 1979 University of Waikato (Hamilton, New Zealand)  
BSc. in Biology

1972 - 1973 Reed College [Portland, Oregon]

## **Honors and awards:**

Honorary Professor in the Chinese Academy of Agricultural Sciences  
Interdisciplinary Teaching Award: 2016  
Outstanding Advisor Award: 2016  
Outstanding Faculty Award: 2012  
Outstanding Faculty Award: 2009  
Outstanding Faculty Award: 2008  
Outstanding Faculty Award: 2006  
Outstanding Faculty Award: 2004  
Outstanding Faculty Award: 2003  
Innovative Teacher Award: 2003  
Faculty Choice Award: 2003  
Final Word Lecture: 1999  
NSF Postdoctoral Fellowship in Plant Biology: 1988 - 1991  
Carnegie Institution of Washington Postdoctoral Fellowship: 1986 - 1988  
University of Utah graduate research fellowship: 1984 - 1985  
NSF Predoctoral Fellowship: 1981 - 1984  
Ivon Watkins-Dow Science Bursary: 1979

## **Professional Society Memberships**

American Society of Plant Biologists  
American Association for the Advancement of Science  
Pennsylvania Academy of Science

## **University service**

- Co-director of the Synthetic Biology track of the Wilkes University MS in Bioengineering Program
- Organizer and chair of the Wilkes University Institutional Biosafety Committee.
- Member of the Strategic Planning Committee
- Former member of the Master Planning Committee
- Former member of the Tenure and Promotion Committee
- Former chair of the Faculty Development Committee (1998-2004), and member since 1996.
- Former member of the Core Review Committee
- Former member of the Core Review Task force
- Former member of the Wilkes University School of Science and Engineering academic standards committee.
- Advisor to the Biology Club.
- Advisor to the Biology Department newsletter.
- Advisor to the Running Club.
- Advisor to 25 students

## **Grants**

1. Determining the functions of non-coding RNAs in the model plant *Arabidopsis thaliana*. Wilkes University Research and Scholarship grant. 2016-2019 \$29,985

2. Development of a Probiotic Treatment for Kidney Stones through Synthetic Biology. Co-Pi with Drs. D. Lucent and A. VanWert. Wilkes University Research and Scholarship grant. 2016-2019 \$30,000
3. Studying Natural Variation in Resveratrol and Piceid Production by Japanese Knotweed. Co-Pi with Drs. K. Klemow and D. Mencer. Wilkes University Mentoring Committee. 2016-2017. \$13,542.80
4. A three-pronged approach to treating kidney stones Co-Pi with Drs. D. Lucent and A. VanWert. Wilkes University Mentoring Committee. 2016-2017 \$13,542.80.
5. Comparing the effectiveness of *Escherichia coli* and *Magnetospirillum gryphiswaldense* as hosts for the expression and purification of enzymes that degrade oxalate. Wilkes University Faculty Development Committee. 2016-2017 \$4,200.
6. Studying Resveratrol production by Japanese Knotweed grown from seed. Co-Pi with Drs. K. Klemow and D. Mencer. Wilkes University Mentoring Committee. 2015-2016. \$13,542.80
7. Development of a probiotic treatment for kidney stones through synthetic biology. Co-Pi with Drs. D. Lucent and A. VanWert. Wilkes University Mentoring Committee. 2015-2016. \$13,542.80.
8. Determining the function of a non-coding RNA in the model plant *Arabidopsis thaliana*. Wilkes University Faculty Development Committee. 2015-2016. \$4,200.
9. URM: Mentoring Minority Students to Graduate Success through Year-Round Research Projects. PI. 2009-2014, NSF \$704,323
10. MRI-R2: Acquisition of Growth Chambers.PI. 2010-2013, NSF \$\$210,880
11. Undergraduate Biology Education Grant at Wilkes University. Co-PI with Dr. M.A. Steele (PI) and 11 other Wilkes faculty. 2008-2012. Howard Hughes medical Institute. \$1,000,000
12. Evaluating the ability of sweet sorghum (*Sorghum bicolor*) to serve as an energy-producing plant when grown using gray water. Co-PI with Dr. Kenneth Klemow. 2010 Ethosgen \$21,262
13. ROA supplement to "Virtual Center for Analysis of Rice Genome Transcription." (Xing-Wang Deng, PI) 2007, NSF \$64,322
14. cRUI: A Multidisciplinary Approach to Understanding the Ecological and Evolutionary Interactions between Food-hoarding Animals and the Oaks. Co-PI with Dr. M.A. Steele (PI), J. Carlson & P. Smallwood . 1999-2003, NSF \$ 833,732
15. I-Grad Link to Learn: informatics initiative, Co-PI with 8 other faculty at Wilkes. 2001-2002, PA Dept of Education, \$280,717
16. Merck-AAAS Undergraduate Science Research Program. PI 2003-2006. \$60,000
17. Cloning and characterizing soybean enoyl-ACP reductase. 1998-2000. USDA/NRICGP. \$49,969.

18. An Inquiry-based Approach to Photosynthesis in the Undergraduate Laboratory: Learning in Real-time. An LEEF proposal submitted to LI-COR Biosciences.2007. PIs W Terzaghi and N. Fetcher \$25,000.
19. Studying rice hybrid vigor. 2009. Wilkes University mentoring grant. \$10, 175.
20. Making sense of hybrid vigor. 2008. Wilkes University mentoring grant. \$14,763
21. Making sense of antisense genes at Yale. 2007. Wilkes University mentoring grant. \$9485.
22. Studying the molecular basis of hybrid vigor: identifying genes that are polymorphic in *Oryza sativa ssp indica* and *Oryza sativa ssp japonica* in order to study their epigenetic modifications and patterns of expression in F1 hybrids. 2008-2009. Wilkes University institutional grant. \$3,780
23. Studying the structure and function of rice native antisense transcripts. 2007-2008. Wilkes University institutional grant. \$4000.
24. Color-coding the organelles in a plant cell. 2006-2007. Wilkes University institutional grant. \$4000.
25. Acclimation of oak seedlings to their light environment.. 2005-2006. Wilkes University institutional grant. \$3274.
26. Who's your momma? Identifying the female parent of acorns in native forests.. 2004-2005. Wilkes University institutional grant. \$3274.
27. Who's your daddy? Identifying the male parent of acorns in native forests.. 2003-2004. Wilkes University institutional grant. \$2500.
28. Analyzing the composition and function of mitochondria from Arabidopsis fatty acid mutants. 2002-2003 Wilkes University institutional grant. \$2500.
29. Cloning and characterizing enoyl-ACP reductase from soybean. 1998. Wilkes University institutional grant. \$1500.
30. Developing a simple technique for generating transgenic plants suitable for undergraduate research at a small institution. 1996. Wilkes University institutional grant. \$1480

## **Publications**

1. Feng Z, Wu C, Wang C, Roh J, Zhang L, Chen J, Zhang S, Zhang H, Yang C, Hu J, You X, Liu X, Yang X, Guo X, Zhang X, Wu F, Terzaghi W, Kim SK, Jiang L, Wan J (2016). SLG controls grain size and leaf angle by modulating brassinosteroid homeostasis in rice. *J Exp Bot.* 67:4241-53. doi: 10.1093/jxb/erw204.

2. Sun N, Wang J, Gao Z, Dong J, He H, Terzaghi W, Wei N, Deng XW, Chen H. (2016). Arabidopsis SAURs are critical for differential light regulation of the development of various organs. *Proc Natl Acad Sci U S A.* pii: 201604782.
3. Wang Y, Wang C, Zheng M, Lyu J, Xu Y, Li X, Niu M, Long W, Wang D, Wang HY, Terzaghi W, Wang Y, Wan J (2016). WHITE PANICLE1, a Val-tRNA Synthetase Regulating Chloroplast Ribosome Biogenesis in Rice, Is Essential for Early Chloroplast Development. *Plant Physiol.* 170: 2110-2123. DOI:10.1104/pp.15.01949
4. Zhou D, Chen W, Lin Z, Chen H, Wang C, Li H, Yu R, Zhang F, Zhen G, Yi J, Li K, Liu Y, Terzaghi W, Tang X, He H, Zhou S and Deng XW (2016). Pedigree-based Analysis of Derivation of Genome Segments of an Elite Rice Reveals Key Regions during Its Breeding. *Plant Biotech. J.* 14:638-48. DOI: 10.1111/pbi.12409
5. Li K, Gao Z, He H, Terzaghi W, Fan L-M, Deng XW, Chen H (2015). Arabidopsis DET1 Represses Photomorphogenesis in part by Negatively Regulating DELLA Protein Abundance in Darkness. *Mol. Plant* 8 : 622-630.
6. Dong J, Terzaghi W, Deng XW, Chen H (2015). Multiple photomorphogenic repressors work in concert to regulate Arabidopsis seedling development. *Plant signaling & behavior* 10(3):e1011934 DOI: 10.1080/15592324.2015.1011934
7. Zheng M, Wang Y, Wang Y, Wang C, Ren Y, Lu J, Peng C, Wu T, Liu K, Zhao S, Liu X, Jiang L, Terzaghi W, Wan J (2015). DEFORMED FLORAL ORGAN1 (DFO1) regulates floral organ identity by epigenetically repressing expression of *OsMADS58* in rice (*Oryza sativa*). *New Phytologist* 206:1476-1490
8. Dong J, Tang D, Gao Z, Yu R, Li K, He H, Terzaghi W, Deng XW, Chen H (2014). Arabidopsis De-etiolated 1 Represses Photomorphogenesis by Positively Regulating Phytochrome-Interacting Factors in the Dark. *Plant Cell* 26:3630-45
9. Wang Y, Fan X, Lin F, He G, Terzaghi W, Zhu D, Deng XW (2014). An Arabidopsis noncoding RNA mediates control of photomorphogenesis by red light. *Proc Natl Acad Sci USA* 111: 10359–10364
10. Wang Y, Wang X, Deng W, Fan X, Liu T-T, He G, Chen R, Terzaghi W, Zhu D, Deng XW (2014). Genomic features and regulatory roles of intermediate-size non-coding RNAs in Arabidopsis. *Mol. Plant* 7 : 514-527.
11. Chen W, Chen H, Zheng T, Yu R, Terzaghi WB, Li Z, Deng XW, Xu J, He H (2014). Highly efficient genotyping of rice biparental populations by GoldenGate assays based on parental resequencing. *Theoretical and Applied Genetics* 127: 297-307
12. Li, J., Yang L., Jin, D., Nezames, C.D., Terzaghi, W and Deng X-W (2013). UV-B–induced photomorphogenesis in plants. *Protein Cell* 4: 485-9

13. Dai, M., Xue, Q., McCray, T., Chen, F., Margavage, K, Lee, J-H, Nezames,C, Guo, L, Terzaghi, W., Wan, J., Deng, X., and Wang, H. (2013). The Arabidopsis PP6 Phosphatase Regulates ABI5 Phosphorylation and ABA Signaling. *Plant Cell* **25**: 517-534
14. Dai, M., Terzaghi, W and Wang, H. (2013). Multifaceted roles of Arabidopsis PP6 phosphatase in regulating cellular signaling and plant development. *Plant Signaling & Behavior* **8**: 1-5
15. Dai, M., Zhang, C., Kania, U., Chen, F., Xue, Q., Mccray, T., Li, G., Qin, G., Wakeley, M., Terzaghi, W., Wan, J., Zhao, Y., Xu, J., Friml, J., Deng, X., and Wang, H. (2012). A novel phosphatase holoenzyme complex directly regulates PIN phosphorylation and auxin efflux in Arabidopsis. *Plant Cell*. **24**: 2497–2514.
16. Shen H, He H, Li J, Chen W, Wang X, Guo L, Peng Z, He G, Zhong S, Qi Y, Terzaghi W, Deng XW (2012). Genome-wide analysis of DNA methylation and gene expression changes in two *Arabidopsis* ecotypes and their reciprocal hybrids. *Plant Cell*. **24**: 875-892
17. Li J , Terzaghi W, Deng XW (2012). Genomic basis for light control of plant development. *Protein Cell* **3**: 1-11
18. Lee, J-H. W.Terzaghi, and Deng XW (2011). DWA3, an *Arabidopsis* DWD protein, acts as a negative regulator in ABA signal transduction. *Plant Sci* **180**:352-357
19. Lee J-H, Yoon H-J, Terzaghi W, Martinez Hernandez C, Dai M, Li J, Byun M-O and Deng X-W (2010). DWA1 and DWA2, two *Arabidopsis* DWD protein components of CUL4-based E3 ligases, act together as negative regulators in ABA signal transduction. *Plant Cell* **22**: 1716-1732
20. Bai S, Zhang J, Li S, Chen H, Terzaghi W, Zhang X, Chi X, Tian J, Luo H, Huang W, Chen Y, Zhang Y (2010). Detection of Six Genetically Modified Maize Lines Using OpticalThin-Film Biosensor Chips. *J. Agric. Food Chem.* **58**: 8490–8494
21. Chen H, Huang X, Gusmaroli G, Terzaghi W, Lau OS, Yanagawa Y, Zhang Y, Li J, Lee JH, Zhu D and Deng XW (2010). Arabidopsis CULLIN4-Damaged DNA Binding Protein 1 Interacts with CONSTITUTIVELY PHOTOMORPHOGENIC1-SUPPRESSOR OF PHYA Complexes to Regulate Photomorphogenesis and Flowering Time. *Plant Cell* **22**:108-123
22. Zhang, Y , S Feng W Terzaghi, XW Deng (2008) *A New Family of Plant E3 Ubiquitin Ligases*. *Plant Signaling & Behavior* **3**: 1049 - 1052
23. Yin,B, D Zhang,L Guo,W Terzaghi, X Wang,T Liu, H He, Z Chen, XW Deng (2008). *Integration of Cytological Features with molecular and epigenetic properties in Rice Chromosome 4*. *Molecular Plant*.**1**: 816-825
24. Klemow, K. and W. Terzaghi (2008) *Introduction to the Biological Literature* Posted at BioSciEdNet: <http://www.bioscienet.org/portal/contribute/uploads/Wilkes.Bio-Lit.lab.doc>
25. Lee, J-H. W.Terzaghi, G. Gusmaroli, J.-B. Frenette Charron, H.-J. Yoon, H Chen, Y J He, Y. Xiong and X.-W. Deng. (2008) Characterization of Arabidopsis and Rice DWD Proteins and

Their Roles as Substrate Receptors for CUL4-RING E3 Ubiquitin Ligases. *Plant Cell* **20**: 152-167

26. Li, X, X Wang, K He, Y Ma, N Su, H He, V Stolc, W Tongprasit, W Jin, J Jiang, W Terzaghi, S Li and X.- W Deng (2008) High resolution mapping of epigenetic modifications of the rice genome uncovers interplay between DNA methylation, histone methylation and gene expression. *Plant Cell* **20**: 259-276
27. Steele, M. A., J.E. Carlson, P. D. Smallwood, A.B. McEuen, T. Contreras, and W. B. Terzaghi (2007). Linking seed and seedling shadows: A case study in the oaks (*Quercus*). In: Seed Dispersal: Theory and its Application in a Changing World. A.J. Dennis, R.J. Green, E.W Schupp, and D.A. Westcott, eds. Oxford University Press, Inc, New York, 720 pp.
28. Steele, M. A., P. D. Smallwood, W. Terzaghi, J. Carlson, T. Contreras, and A. McEuen. (2003) Oak Dispersal Syndromes: Do red and white oaks exhibit different dispersal strategies? Proceedings of the Upland Oak Symposium, October 2002, Technical Publication of the U.S. Forest Service.
29. Terzaghi WB (1999) Cornucopia or Pandora's Box? The promise and perils of cloning, genetic engineering and bioinformatics. Wilkes University Press. Wilkes-Barre, PA
30. Terzaghi WB, Bertekap RL Jr. and Cashmore AR (1997) Intracellular localization of GBF proteins and blue light-induced import of GBF2 fusion proteins into the nucleus of cultured *Arabidopsis* and soybean cells. *Plant J.* **11**: 967-982
31. Chao Q, Rothenberg M, Solano R, Roman G, Terzaghi W and Ecker JR (1997) Activation of the ethylene gas response pathway in *Arabidopsis* by the nuclear protein ETHYLENE-INSENSITIVE3 and related proteins. *CELL* **89**: 1133-1144
32. Terzaghi WB and Cashmore AR (1997) Plant cell transfection by electroporation. in : Methods in Molecular Biology, vol. 62: Recombinant Gene Expression Protocols. (R. Tuan, ed.) Humana Press, Inc., Totowa, N.J. 453-462
33. Terzaghi WB, Cashmore AR (1995) Light-regulated transcription. *Annu. Rev. Plant Physiol. Plant Mol. Biol.* **46**: 445-474
34. Terzaghi W, Cashmore A (1995) Seeing the light in plant development. *Current Biology* **5**: 466-468
35. Schindler U, Terzaghi W, Beckmann H, Kadesch T, Cashmore AR (1992) DNA binding site preferences and transcriptional activation properties of the *Arabidopsis* transcription factor GBF1. *EMBO J* **11**: 1275-1289
36. McGrath JM, Terzaghi WB, Sridhar P, Cashmore AR, Pichersky E (1992) Sequence of the fourth and fifth Photosystem II type I chlorophyll a/b-binding protein genes of *Arabidopsis thaliana* and evidence for the presence of a full complement of the extended CAB gene family. *Plant Mol. Biol.* **19**: 725-733

37. Terzaghi WB (1989) Manipulating membrane fatty acid compositions of whole plants with Tween - fatty acid esters. *Plant Physiol* **91**: 203-212
38. Terzaghi WB, DC Fork, JA Berry, CB Field (1989) Low and high temperature limits to PSII: a survey using *trans*-parinaric acid, delayed light emission, and Fo chlorophyll fluorescence. *Plant Physiol.* **91**: 1494-1500
39. Terzaghi WB (1987) Manipulating membrane fatty acid compositions of soybean plants. *In* : PK Stumpf, JB Mudd, WD Nes, eds, *The Metabolism, Structure, and Function of Plant Lipids*. Plenum Press, New York, 209-211
40. Terzaghi WB (1986) A system for manipulating the membrane fatty acid composition of soybean cell cultures by adding Tween-fatty acid esters to their growth medium: basic parameters and effects on cell growth. *Plant Physiol* **82**: 771-779
41. Terzaghi WB (1986) Metabolism of Tween-fatty acid esters by cultured soybean cells: kinetics of incorporation into lipids, subsequent turnover, and associated changes in endogenous fatty acid synthesis. *Plant Physiol* **82**: 780-786
42. Terzaghi WB, EJ Roth, P Keim, RH Honeycutt, KG Lark (1985) A somatic genetic system for soybean. *In* : M Freeling, ed, *Plant Genetics*. Alan R Liss, Inc, New York, 771-789
43. Zhou J-P, EJ Roth, W Terzaghi, KG Lark (1981) Isolation of sodium dependent variants from haploid soybean cell culture. *Plant Cell Reports* **1**: 48-51
44. Schouten CJ, W Terzaghi, Y Gordon (1981) Summaries of water quality and mass transport data for the Lake Taupo catchment. Water and Soil Division, Ministry of Works and Development, PO Box 12-041, Wellington, New Zealand.

#### **Recent Published Abstracts of Student Research (last 5 years)**

1. K. McHale, T. Wasiluk, C. Morocho, M. Roueinfar, K. Abraham, L. Bauman, D. Lucent, W. Terzaghi Creating atrazine-resistant *Synechococcus elongatus*. Presented at the annual meeting of the ASPB in Austin TX, July 9-13, 2016
2. M Yuhas, B Morocho, J Akakpo, XW Deng, W Terzaghi. Studying the Functions of Two *Arabidopsis thaliana* Noncoding RNAs. Presented at the annual meeting of the ASPB in Austin TX, July 9-13, 2016
3. W Terzaghi, J Luchetta, W Kozub, A Mikolon, Y Patel, D Pupaza, M Yatison, K Klemow, D Mencer. Resveratrol and Piceid Content in Japanese Knotweed: Correlations with Genetic Variability and Post-harvest Treatments. Presented at the annual meeting of the ASPB in Austin TX, July 9-13, 2016
4. M Yatison, J Luchetta, K McHale, A Mikolon, D Pupaza, K Klemow, D Mencer, W Terzaghi. **Studying Resveratrol and Piceid Production by Japanese Knotweed**. Presented at the annual meeting of the ASPB in Minneapolis MN, July 26-30, 2015



5. M Yuhas, L Bauman, B Morocho, C Morocho, K Hiriyak, J Akakpo, XW Deng, W Terzaghi. **Characterizing Arabidopsis Mutants Lacking Specific Non-Coding RNAs.** Presented at the annual meeting of the ASPB in Minneapolis MN, July 26-30, 2015
6. B Morocho, M Yuhas, T Wasiluk, J Akakpo, XW Deng, W Terzaghi. **Characterizing Arabidopsis Mutants Lacking Specific Non-Coding RNAs.** Presented at the annual meeting of the Mid-Atlantic section of the ASPB in Swarthmore, PA April 18, 2015
7. Akakpo J, Morocho B, Gicewicz E, Deng XW, Terzaghi W. Characterizing Arabidopsis Mutants Lacking Specific Non-Coding RNAs. Presented at the annual meeting of the ASPB in Portland, OR July 12-16, 2014
8. L Gunn, G McFarlane, K Margavage, K Sones, M Yatison, K Klemow, D Mencer, W Terzaghi. Studying Resveratrol and Piceid Production by Japanese Knotweed. Presented at the annual meeting of the ASPB in Portland, OR July 12-16, 2014
9. B Morocho, J Akakpo, E Gicewicz, XW Deng, W Terzaghi. Characterizing Arabidopsis Mutants Lacking Specific Non-Coding RNAs. Presented at U Maryland Plant Biology Symposium on May 29, 2014
10. J Akakpo, B Morocho, E Gicewicz, XW Deng, W Terzaghi. Characterizing Arabidopsis Mutants Lacking Specific Non-Coding RNAs. Presented at the Spring meeting of the Mid-Atlantic chapter meeting of the ASPB on April 12, 2014
11. L Gunn, G McFarlane, K Margavage, K Sones, M Yatison, K Klemow, D Mencer, W Terzaghi. Studying Resveratrol and Piceid Production by Japanese Knotweed. Presented at the Spring meeting of the Mid- Atlantic chapter meeting of the ASPB on April 12, 2014
12. W Terzaghi, M Yuhas, B Morocho, G McFarlane, K. Margavage *Using climate change to learn about plants in courses and outreach activities.* Presented at the annual meeting of the ASPB in Providence RI July 20-24, 2013
13. B Morocho, K. Margavage, L Gunn, XW Deng, W Terzaghi. *Differential Gene Expression in Arabidopsis F1 hybrids.* Presented at the annual meeting of the ASPB in Providence RI July 20-24, 2013
14. T Mike, XW Deng, W Terzaghi *Antisense Copies of Light-Regulated Genes in Rice* Presented at U Maryland Plant Biology Symposium on May 23, 2013
15. B Morocho, T Mike, N Joshi, A Patel, LWilliams, XW Deng, W Terzaghi. *Differential Gene Expression in Arabidopsis F1 hybrids* Presented at U Maryland Plant Biology Symposium on May 23, 2013
16. T Mike, XW Deng, W Terzaghi *Antisense Copies of Light-Regulated Genes in Rice* Presented at the Spring meeting of the Mid- Atlantic chapter meeting of the ASPB on April 6, 2013

17. B Morocho, T Mike, N Joshi, A Patel, LWilliams, XW Deng, W Terzaghi. *Differential Gene Expression in Arabidopsis F1 hybrids*. Presented at the Spring meeting of the Mid- Atlantic chapter meeting of the ASPB on April 6, 2013
18. W.Terzaghi, T. Mike, N. Joshi, J. Bird, K. Margavage, B. Morocho, X-W. Deng. *Antisense copies of light-regulated genes in rice* Presented at ASPB annual meeting, Austin TX, July 20-24, 2012
19. J. Bird, T. Mike, N. Joshi, M. Ritsick, X-W. Deng, W Terzaghi. *Potential antisense copies of light-regulated rice genes*. Presented at ASPB annual meeting, Minneapolis, MN, August 6 - 10, 2011
20. L. Williams, K. Margavage, B. Morocho, A. Patel, X-W. Deng, W Terzaghi. *A Research-Based Course Studying Differential Gene Regulation in Rice F1 hybrids*. Presented at ASPB annual meeting, Minneapolis, MN, August 6 - 10, 2011