GERALD A. TUSKAN
Oak Ridge National Laboratory
1 Bethel Valley Road
Oak Ridge, TN 37831-6404
865-576-8141 - tuskanga@ornl.gov

***Education and Training*:**

Texas A&M University, College Station, TX	Genetics	Ph.D.	1984
Mississippi State University, Starkville, MS	Forest Genetics	M.S.	1980
Northern Arizona University, Flagstaff, AZ	Forest Management	B.S.	1978

Research and Professional Experience:

2014 – Present	Corporate Fellow, Biosciences Division, Oak Ridge National Laboratory (ORNL), Oak Ridge, TN
2006 – Present	Co-Lead Plant Sciences Program, Joint Genome Institute, Walnut Creek, CA
2010 – 2014	Distinguished Scientist, Biosciences Division, ORNL
2005 – 2010	Senior Scientist I-II, Environmental Sciences Division, ORNL
1990 – 2005	Research Scientist I-III, Environmental Sciences Division, ORNL
2002 – 2007	Research Professor, Departments of Plant Sciences; University of Tennessee, Knoxville, TN
1984 – 1990	Associate Professor of Horticulture and Forestry, North Dakota State University, Fargo, ND
1981 – 1984	Instructor, Forest Science Department; Texas A&M University, College Station, TX
1979 – 1980	Graduate Research Assistant; Forestry Department; Mississippi State University, Starkville, MS
1978 – 1979	Research Technician; Forestry Department; Northern Arizona University, Flagstaff, AZ

Publications** (10 out of total 181)**:

1. Timm, C, DA Pelletier, SS Jawdy, LE Gunter, JA Henning, N Engle, J Aufrecht, E Gee, Z Yang, T-Y Lu, TJ Tschaplinski, MJ Doktycz, GA Tuskan, DJ Weston. 2016. Two poplar isolates induce additive favorable responses in a constructed plant-microbiome system. Frontiers in Plant Science 7:497. doi: 10.3389/fpls.2016.00497.
2. Bryan, AC, W Muchero, S Jawdy, L Gunter, E Gjersing, R Sykes, M Hinchee, KA Winkeler, CM Collins, N Engle, TJ Tschaplinski, X Yang, G Tuskan, J-G Chen. 2016. Knockdown of a laccase in *Populus deltoides* confers altered cell wall chemistry and increased sugar release. Plant Biotech Journal doi: 10.1111/pbi.12560.
3. Bhagia, S, W Muchero, R Kumar, GA Tuskan, CE Wyman. 2016. Natural genetic variability reduces recalcitrance in poplar. Biotechnology for Biofuels 9:106. doi: 10.1186/s13068-016-0521-2.
4. Sun, Q, R Khunsupat, K Akato, J Tao, N Labbé, NC Gallego, JJ Bozell, TG Rials, GA Tuskan, TJ Tschaplinski, AK Naskar, Y Pu, R Ragauskas. 2016. A study of poplar organosolv lignin after melt rheology treatment as carbon fiber precursors. Green Chemistry doi: 10.1039/C6GC00977H.

5. DePaoli, HC, GA Tuskan, X Yang. 2016. An innovative platform for quick and flexible joining of assorted DNA fragments. Scientific Reports 6:19278. doi:10.1038/srep19278.
6. Liu, D, R Hu, KJ Palla, GA Tuskan, X Yang. 2016. Advances and perspectives on CRISPR/Cas9 systems in plant genomics research. Current Opinions in Plant Biology 30:70–77.
7. Czarnecki, O, AC Bryan, SS Jawdy, X Yang, J-G Chen, GA Tuskan. 2016. Simultaneous knock-down of six non-family genes using a single synthetic RNAi fragment in *Arabidopsis thaliana*. Plant Methods 12:16. doi:10.1186/s13007-016-0116-8.
8. Zheng, K, X Wang, DA Weighill, H-B Guo, M Xie, Y Yang, J Yang, S Wang, DA Jacobson, H Guo, W Muchero, GA Tuskan, J-G Chen, J.-G. 2016. Characterization of DWARF14 genes in *Populus*. Scientific Reports 6: 21593. doi.org/10.1038/srep21593.
9. Mewalal, R, DK Rai, D Kainer, F Chen, C Külheim, GF Peter, GA Tuskan. 2016. Plant-derived terpenes: A feedstock for specialty biofuels. Trends in Biotechnology doi:org/10.1016/j.tibtech.2016.08.003.
10. Kalluri, UC, R Payyavula, JL Labbé, N Engle, G Bali, SS Jawdy, R Sykes, M Davis, A Ragauskas, G Tuskan, T Tschaplinski. 2016. Down-regulation of KORRIGAN-like endo-β-1,4-glucanase genes impacts carbon partitioning, mycorrhizal colonization and biomass production in *Populus*. Frontiers in Plant Science doi: 10.3389/fpls.2016.01455.

Synergistic Activities:

- Editorial Board for Biotechnology for Biofuels, 2008-present
- Received the 2012 Forest Biotechnologist of the Year
- Received the 2007 ORNL Outstanding Scientific Achievement Award
- Received the 2007 Alumnus of Year at Northern Arizona University
- Currently serves on the Science Advisory Board for EU Seventh Framework Program WATBIO project, Southampton, England; Umea Plant Sciences Department, Umea, Sweden; Portuguese National Cork Oak Sequencing, Lisbon, Portugal; School of Forest Resources, Michigan Technology Institute, Houghton, Michigan; NSF-Southwest Experimental Garden Array (SEGA), Flagstaff, Arizona