

**Jason A. Holliday**

Department of Forestry  
Virginia Tech  
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**a. Professional Preparation**

2004 – 2009     *University of British Columbia*  
Ph.D. (Forestry)

1997 – 2001     *University of Victoria*  
B.Sc. (Biology)

**b. Appointments**

*Virginia Tech*, Department of Forestry  
Assistant Professor (2009 - 2015), Associate Professor, 2015 - Present

*University of British Columbia*, Department of Forest Science  
Postdoctoral Fellow, 2009

**c. Publications**

1. Zhang M, Suren H, Holliday JA (2019) Phenotypic and genomic local adaptation across latitude and altitude in *Populus trichocarpa*. *Genome Biology and Evolution* (In press)
2. Westbrook JW, Holliday JA, Newhouse A, Powell WA (2019) A plan to diversify a transgenic blight-tolerant American chestnut population. *Plants Planet People* (In press)
3. Holliday JA, Aitken SN, Cook JEK, Fady B, Gonzalez-Martinez SC, Heuertz M, Jaramillo-Correa JP, Lexer C, Staton M, Whetten RW, Plomion C (2017) Advances in ecological genomics in forest trees and applications to genetic resources conservation and breeding. *Molecular Ecology* 26(3): 706-17.
4. Yeaman S, Hodgins KA, Lotterhos KE, Suren H, Nadeau S, Degner JC, Nurkowski KA, Smets P, Wang T, Gray LK, Liepe KJ, Hamann A, Holliday JA, Whitlock MC, Rieseberg LH, Aitken SN (2016) Convergent local adaptation to climate in distantly related conifers. *Science* 353(6306): 1431-33.
5. Zhang M, Zhou L, Bawa R, Suren H, Holliday JA (2016) Recombination rate variation, hitchhiking, and demographic history shape deleterious load in poplar. *Molecular Biology and Evolution* 33(11): 2899-2910.
6. Zhou L, Holliday JA (2012) Targeted enrichment of the black cottonwood (*Populus trichocarpa*) gene space using sequence capture. *BMC Genomics* 13:703.
7. Suren H, Hodgins KA, Yeaman S, Nurkowski KA, Smets P, Rieseberg LH, Aitken SN, Holliday JA (2016) Exome capture from the spruce and pine giga-genomes. *Molecular Ecology Resources* 16(5): 1136-46.
8. Holliday JA, Zhou L, Bawa R, Zhang M, Oubida RW (2016) Evidence for extensive parallelism but divergent genomic architecture of adaptation along altitudinal and latitudinal gradients in *Populus trichocarpa*. *New Phytologist* 209(3): 1240-51.
9. Zhou L, Bawa R, Holliday JA (2014) Exome resequencing reveals signatures of demographic and adaptive processes across the genome and range of black cottonwood (*Populus trichocarpa*). *Molecular Ecology* 23(10):2486-99
10. Yeaman S, Hodgins KA, Suren H, Nurkowski KA, Rieseberg LH, Holliday JA, Aitken SN (2014) Conservation and divergence of gene expression plasticity following ~140 million years of evolution

in lodgepole pine (*Pinus contorta*) and interior spruce (natural hybrid populations of *Picea glauca* and *Picea engelmannii*). *New Phytologist*, 203(2):578-91.

#### **d. Synergistic Activities**

##### **1. Teaching**

- 2010 - 2018 - Genetics of Natural and Managed Populations, Virginia Tech
- 2012 - Plant Population Genomics (Graduate), Virginia Tech
- 2013 - Ecological Genomics (Graduate), Virginia Tech
- 2015 - Population Genomics (Graduate), Virginia Tech

##### **2. Professional Service**

- 2012 - present - Associate Editor, *The Plant Genome*
- 2014 - USDA Predoctoral and Postdoctoral Fellowship panel reviewer, Washington, D.C.
- 2013 - Local organizing committee, Tree Biotechnology Conference. Asheville, NC
- Ad hoc grant reviewer for Natural Sciences and Engineering Research Council of Canada, Austrian Science Fund, University of Bordeaux (France), Research Fund of Quebec (Canada).
- Ad hoc reviewer for *Ecology Letters*, *Evolutionary Applications*, *Forest Ecology and Management*, *Genetics*, *Heredity*, *Molecular Biology and Evolution*, *Molecular Ecology*, *Molecular Ecology Resources*, *Nature Communications*, *New Phytologist*, *Proceedings of the National Academy of Sciences*, *Tree Genetics and Genomes*, *Tree Physiology*, *Trends in Ecology and Evolution*

##### **3. Professional Workshops**

- 2011 - Invited participant, American Society for Plant Biology Plant Science Research Summit, Howard Hughes Medical Institute, Chevy Chase, MD
- 2010 - Invited participant, DIVERSITAS Eco-evolutionary workshop, Fukuoka, Japan.

##### **4. Mentoring**

- Mentor for >20 undergraduate research assistants, four M.S. students, four Ph.D. students, and five postdoctoral fellows
- 2013 - 2015 - Mentor for Fulbright Institute for International Education M.S. student from Burkina Faso
- 2013 - Faculty advisor for Multicultural Academic Opportunities Program (MAOP) summer student from Duke University
- 2012 - 2015 - Faculty advisor, Virginia Tech Forestry Club

##### **5. Outreach**

- 2017 - NPR interview on our work to integrate genomics into backcross breeding for American chestnut restoration (<https://www.npr.org/2017/01/07/508668023/scientists-work-to-bring-back-once-thriving-american-chestnut-tree>)
- 2015 - Genomic selection to accelerate backcross breeding in American chestnut. The American Chestnut Foundation Annual Meeting. State College, Pennsylvania
- 2012 - Climate change workshop for the Virginia Summer Residential Governor's School for Agriculture