

**S3: Past tree genomics/molecular genetics support in the form of public and private grant funding for loblolly pine, slash pine and DF.**

Year	Title	PI	Institution	Source	Award (K \$)
1988	Construction of a saturated linkage map for loblolly pine	Neale	USFS, UC Davis	USDA	250
1991	Genetic mapping of genes for wood specific gravity in loblolly pine	Neale	USFS, UC Davis	USFS	225
1992	Genetic mapping of complex traits in loblolly pine	Neale	USFS, UC Davis	WeyCo	10
1993	Codominant PCR-based markers for pines and other conifers	Harry / Neale	USFS, UC Davis	USDA	200
1993	Molecular marker and quantitative trait mapping in loblolly pine	Neale / Wheeler	USFS, UC Davis	USDA	250
1993	Genetic mapping of complex traits in loblolly pine	Neale	USFS, UC Davis	WeyCo	30
1994	Mapping quantitative trait loci coding for wood specific gravity in loblolly pine	Neale	USFS, UC Davis	WeyCo	30
1995	EST sequencing and mapping in loblolly pine	Whetten, Campbell, Sederoff	NCSU	USDA Plant Genome	165
1996	Development and validation of MAS methods for wood property traits in loblolly pine and hybrid poplar	Tuskan, Neale, Bradshaw et	DOE	DOE Agenda 2020	750
1996	Comparative mapping in the genus Pinus	Neale	USFS, UC Davis	USDA	250
1996	Fine structure mapping and verification of wood quality QTLs in loblolly pine	Neale	USFS, UC Davis	USDA	280
1996	Mapping genes related to adaptation in Douglas-fir hybrids	Strauss et al	OSU	?	175
1997	Dissecting genetic control of growth rhythm in Douglas-fir through QTL mapping	Neale, Wheeler et al	USFS, UC Davis	USDA	196
1997	Quinate, focal point of metabolism leading to lignin	Jensen / Bonner	U. Florida	?	109
1997	Wood properties of pine with genetically modified lignin	Sederoff, Mackay	NCSU	USDA	111
1998	A molecular analysis of carbohydrate regulation in loblolly pine	Ellsworth	Brookhaven	DOE	145
1998	Search for major genes using progeny test data to accelerate the development of genetically superior loblolly pines	Li et al.	NCSU	DOE Agenda 2020	475
1997	Pine gene discovery project	Whetten, Sederoff et al	NCSU	DOE and AFPA	575 + 120
1999	Quinate, focal point of metabolism leading to lignin	Jensen / Bonner	U. Florida	?	234
1999	Genomics of wood formation in loblolly pine	Sederoff/ Neale/ O'Malley	NCSU etc	NSF	4450
2000	QTL and candidate genes for growth traits in loblolly pine	Williams	Texas A&M	DOE	?

2000	Host:Pathogen Signaling in Southern Pine Pathosystems	Davis, Morse	UFL	SRS--SIFG	100
2001	Allele discovery for genes controlling economic traits in loblolly pines	Neale, Davis, White, Dean, Covert	UC Davis, UF, UGA	IFAFS	1,700
2001	Wood and fiber quality of juvenile pine: characterization and utilization	Chang, Kadla, Sederoff, O'Malley	NCSU	IFAFS	3,000
2002	Genomics of loblolly pine embryogenesis	Cairney et al	IPST	NSF	1,380
2002	Transcriptome responses to environmental conditions in loblolly pine roots	Dean et al.	UGA	NSF	1,651
2002	Discovery of genes controlling adaptive traits in Douglas-fir	Neale	USFS	USFS Agenda 2020	180
2002	Development of a Loblolly Pine FISH-based Karyotype	Faridi, Stelly	Texas A&M	SRS--SIFG	33
2002	Performance and Value of CAD-Deficient Pine	Mullin, et al.	NCSU, SIFG	Agenda 2020	1,125
2002	Drought Resistant Pines for Texas Forests	Loopstra	TAMU	Texas Higher Education Coordinating Board –	160
2003	Development and Comparison of FISH-based Karyotypes of Loblolly, Shortleaf, Longleaf and Slash Pines	Faridi	Texas A&M	SRS--SIFG	58
2003	Development of SSR markers from EST sequences in loblolly pine	Nelson, Echt, Peterson.	SIFG, MSU	SRS--Agenda 2020	83
2004	Differential gene expression in loblolly pine ( <i>Pinus taeda</i> L.) challenged by the the fusiform rust fungus, <i>Cronartium quercuum</i> f.sp. <i>fusiforme</i>	van Zyl, Amerson	NCSU	SRS--SIFG	44
2004	Accelerating pine genomics through development and utilization of molecular and cytogenetic resources	Peterson, Faridi, Nelson	MSU, SIFG	NSF	1,600
2004	Genetic Screening for Resin Traits Linked to SPB Resistance	Davis, Morse, Nelson, Strom	UFL, SIFG	SRS--SPB	189
2004	Discovery of genes controlling wood property traits in Douglas-fir	Neale et al	USFS	USFS Agenda 2020	180
2004	Association mapping of adaptive traits in Douglas-fir	Neale, Howe	USFS, UC Davis, OSU	USDA-NRI	490
2005	Association genetics of natural genetic variation and complex traits in pine	Langley, Neale	UC Davis, UF, NCSU, TAMU	NSF	5,902
2005	Assessing the Impact of Intensive Forest Management Practices on Wood Formation and Quality at the Level of Gene Expression	Dean, Nairn, Lorenz	U Georgia	Agenda 2020 USFS	369
2005	Molecular Cytogenetics in Pine :	Byram and	TAMU,	USDA FS	75

	Development comparison of FISH-based Karyotypes of Loblolly, Shortleaf, Longleaf and Slash pines.	Faridi	USFS	SRS	
2005	Microsatellite assessment of genetic diversity in <i>Tsuga</i>	Frampton and Nelson	NCSU, SIFG	USFS, SRS	50
2005	Single cell EST sequencing to define resistant and susceptible molecular host responses to hemlock woolly Adelgid	Morse, Peter, Davais and Nelson	UFL, SIFG	USFS, NRS	88
2006	Genes for Improved Wood Properties	Peter, Kirst	UF	CPBR, ArborGen	205
2006	Comparative Resequencing in the Pineaceae	Neale and Langley	UC Davis	NSF	502

**Table S2. Summary of grants for current and other PIs.**

Taxa	No. Grants Current PI's	Total Value PI Grants	Total No. of Grants	Total Value All Grants
Southern Pines	14	\$15,972,000	33	\$25,540,000
Douglas-fir	4	\$1,221,000	5	\$1,046
Multiple Species	3	\$952,000	3	\$952,000
Other			4	\$481,000

Materials compiled by Nicholas Wheeler, David Neale and Glenn Howe  
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