

D. Paul Jackson, Ph.D.

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I am honored and grateful to have been nominated by my colleagues to represent the College of Applied and Natural Sciences for the University Senate Chair Award. I am extremely thankful to have an Associate Professor position at a nationally recognized institution. With so many other fellow educators at Louisiana Tech, I share a genuine and passionate desire to prepare students for the next phase of their lives, to answer scientific questions and solve operational problems through research activities, and to give back my time and effort to the university and community in the form of service.

TEACHING

In the cover letter I submitted years ago for the position I hold at Louisiana Tech, I stated that “it would be rewarding to be in a position where I could encourage students to dig deep within themselves and attain goals they otherwise may have never dreamed possible.” That desire is even stronger today as I have continued to develop teaching experience over the years. I feel students respond well to being treated individually while understanding that even with traditional boundaries in place, they can approach me for assistance and guidance. For me, teaching occurs in many forms; during advising sessions, while students work alongside me conducting research trials, and in the classroom and laboratory where I teach a range of Plant Science courses.

I have a true passion for Plant Science, and I believe that passion resonates to the students by the way I communicate with them. Almost every quarter, students from other majors that are enrolled in the introductory Plant Science course ask me how they can minor in Plant Science. I can see them become interested and they tell me how they have started a small garden or sought job opportunities that involve plants in some way. I am grateful that I had several years of experience working in the field with agriculture and forestry before becoming an educator, and I can tell the students real life stories where people were impacted, problems were solved, and problems were not solved.

Developing student expertise in these areas involves receiving hands-on experience. In the laboratories of my courses, students get involved in projects such as re-designing and planting the landscapes over all of Tech’s campus. My students are responsible for the new landscape designs and the planting of hundreds of plants at the Tech Farm Salesroom, Reese Hall, Lomax Hall, the John D. Griffin Garden, and President Guice’s home. Other activities in my laboratories have involved students performing turfgrass mowing trials, growing lettuce in hydroponics, mixing growing media and sowing seeds, mixing and applying fertilizers and pesticides, renovating greenhouses, grafting trees, and laying brick pavers. Getting students off campus to listen to and shake the hands of the professionals who work in these fields every day is extremely important. Over the years my students have visited places such as Squire Creek golf course (Choudrant), Willis Farms (Doyline), Biedenharn Gardens (Monroe), LA State Tree Nursery (Columbia), Rudder Farms (El Dorado, AR), Wilderness Turf (Mer Rouge), Trey’s Landscaping (Farmerville), Kavanaugh’s Landscaping (Ruston), Weyerhaeuser Nursery (Magnolia, AR), Irrigation Mart (Ruston), Michael’s Mayhaws (Simsboro), the LSU Landscape Horticulture Research Station (Hammond), Color Spot Nursery (Troup, TX), Stephen F. Austin State University Gardens (Nacogdoches, TX), and Young’s Plant Farm (Auburn, AL).

At Louisiana Tech, the one on one advising of students is unique and a process that I am grateful for because I can teach students indirectly when we are meeting each quarter. There, I can give them encouragement, constructive criticism, and advice involving their performance in and out of the classroom. I often go home at the end of the day feeling like I may have made a difference in a person’s life based on the conversations had or experiences shared. That’s a great feeling.

RESEARCH

As a scientist, I challenge myself to use the experience and training I have gained in my career towards finding answers to questions that contribute to the scientific community and that can help individuals operationally in agricultural production. I am trained specifically in tree seedling nursery management with an emphasis on tree seedling quality and outplanting performance. With a 15 percent research appointment, I have received federal funding totaling about \$95,000

to investigate areas of tree seedling response to herbicides, hybridization, and exposure to pathogens. In doing this research, I have been able to teach undergraduate students the scientific method by them learning the background of the problems, setting up and conducting the research trials, compiling and analyzing data, and presenting the results. This is my favorite part of the job I have at Louisiana Tech. I mentored four undergraduate students and one graduate student with a total of six oral presentations and four poster presentations. Some have won awards, and more impressively, two undergraduates have co-authored two different refereed journal articles from their work. One also presented recently at two professional conferences winning awards there and represented Tech at the University of Louisiana Systems Academic Summit held at Grambling State University.

I believe securing grant funding is critical to maintaining not only a research component of my job, but to perpetually enhance Tech facilities and employ students. I have been able to employ four undergraduate students over the last four years with research funds. The students get exposed to a range of tasks that prepare them for the workforce and graduate school. These same funds have assisted with purchasing important supplies and upgrading equipment used daily at the Louisiana Tech Greenhouses.

Another wonderful aspect of research is the ability to collaborate with others. I value collaboration immensely, and feel that together with other experts, more robust research can be performed and contributions made to science. I have collaborated with other faculty at Tech outside of my Department, which helps to foster relationships as well as provide recognition for the University. I have also collaborated with people from across Louisiana and in Alabama, Georgia, Idaho, North Carolina and Virginia.

SERVICE

Specializing in Plant Science, I get called upon often by laypeople in the community, local government, the university, and students asking anything from simple advice to my time in person to look at a certain situation. It could be concern over the health of a tree, a problem with tomatoes, or an issue with turfgrass; it is always something different. Often, I am invited by local organizations to speak at their scheduled meetings on a particular topic related to plants. I enjoy these types of opportunities to meet new people. It is a chance to also relay to them what our program is like at Tech, which often surprises people who do not realize how much is done on South Campus. I have been proactive in communicating my expertise to the community by inviting them to South Campus for Home Gardening Workshops which I hosted each year from 2014-2016. Each year had a different theme and the number of attendees increased each year from 35 at the first workshop to 93 at the last one held. Recently, I assisted with coordinating and hosting the Back to Your Roots conference on South Campus which brought well known experts in sustainable agriculture from all over the country to Tech to speak to about 150 people in concurrent sessions over a three day period.

Giving my time back to Louisiana Tech is important to me. Without stepping up and serving in various ways on committees, for organizations, and at events, the mission of our institution would not be fulfilled. Deep down I have a loyalty to people and places that have given me opportunities to succeed. That is why when I am called upon to assist in various ways, I rarely decline. By stepping up and working alongside my colleagues, a lot can get done, and that makes Louisiana Tech stand above the rest. I have served on the Advisory Council to the Dean, the College of ANS Graduate Council, the University Senate, and numerous search committees. When the initiative to plant Noble Trees on campus began, Dr. Guice asked for my assistance along with others to give suggestions on species selection and their placement on campus. I was excited and honored to be a part of that process, which has gained momentum with hundreds of trees planted since that time.

Visiting with prospective students is something that I do quite often. Usually, it is an impromptu visit that I may only know about the day of, but I try to make time and show the student and their parents great enthusiasm and support to make that life changing decision. I probably visit with and tour around at least 4-5 prospective students per quarter. I spend many evenings and weekends donating my time to our Agriculture and Forestry activities that involve Future Farmers of America Career Development Events, poinsettia and livestock scholarship auctions, scholarship banquets, career fairs, sponsoring the Greenscape club, and giving guest lectures in many other classes.

Quarter Taught	Course Descriptor	Course Name	Instructor Ratings	Beginning Enrollment	Ending Enrollment
Fall 2014	HNRS 100	Honors University Seminar	N/A	17	17
	PLSC 101	Introduction to Plant Science	4.0	32	29
	PLSC 301	Landscape Design	4.0	9	9
	PLSC 400A	Special Problems in Plant Science	N/A	1	1
Winter 2015	PLSC 220	Greenhouse Management	3.9	15	14
	PLSC 422	Pest Management	4.0	14	14
Spring 2015	PLSC 101	Introduction to Plant Science	3.8	60	55
	PLSC 284	Landscape Plants	4.0	10	10
	PLSC 400A	Special Problems in Plant Science	N/A	2	2
	AGSC 516	Nutrition of Horticultural Crops	N/A	1	1
Fall 2015	HNRS 100	Honors University Seminar	N/A	17	17
	PLSC 101	Introduction to Plant Science	3.7	42	39
	PLSC 225B	Special Problems in Plant Science	N/A	1	1
	PLSC 301	Landscape Design & Contracting	4.0	8	8
	PLSC 400B	Special Problems in Plant Science	N/A	1	1
	PLSC 400C	Special Problems in Plant Science	N/A	1	1
Winter 2016	PLSC 220	Greenhouse Management	3.7	17	17
	PLSC 400A	Special Problems in Plant Science	N/A	1	1
	PLSC 422	Pest Management	3.8	15	15
Spring 2016	PLSC 101	Introduction to Plant Science	3.8	61	58
	PLSC 312	Turf Management	3.5	17	17
	PLSC 400A	Special Problems in Plant Science	N/A	2	2
Fall 2016	PLSC 101	Introduction to Plant Science	3.9	63	59
	PLSC 225B	Special Problems in Plant Science	N/A	1	1
	PLSC 301	Landscape Design & Contracting	4.0	10	10
	PLSC 400C	Special Problems in Plant Science	N/A	1	1
	AGSC 516	Tree Seedling Nursery Management	N/A	4	4
Winter 2017	PLSC 220	Greenhouse Management	3.7	18	18
	PLSC 422	Pest Management	3.4	13	12
	ANS 589A	Practicum in College Teaching	N/A	1	1
Spring 2017	PLSC 101	Introduction to Plant Science	4.0	65	58
	PLSC 284	Landscape Plants	3.8	16	16
Fall 2017	PLSC 101	Introduction to Plant Science	4.0	63	58
	PLSC 301	Landscape Design & Contracting	3.5	7	7
	PLSC 400A	Special Problems in Plant Science	N/A	1	1
Winter 2018	PLSC 220	Greenhouse Management	3.7	18	18
	PLSC 422	Pest Management	3.4	19	19
Spring 2018	PLSC 101	Introduction to Plant Science	3.9	56	51
	PLSC 312	Turf Management	3.5	18	18
	PLSC 400A	Special Problems in Plant Science	N/A	2	2
	PLSC 400C	Special Problems in Plant Science	N/A	1	1

Quarter Taught	Course Descriptor	Course Name	Instructor Ratings	Beginning Enrollment	Ending Enrollment
Fall 2018	PLSC 101	Introduction to Plant Science	3.7	73	68
	PLSC 301	Landscape Design & Contracting	4.0	16	16
Winter 2019	ANS 289C	Vegetable Gardening	3.7	47	47
	PLSC 422	Pest Management	3.8	19	19
Spring 2019	PLSC 101	Introduction to Plant Science		60	57
	PLSC 284	Landscape Plants		22	20
	PLSC 400A	Special Problems in Plant Science		1	1

SCHOLARLY ACTIVITY

Manuscripts Published: 2014-2019

- Bolner, N.G., **D.P. Jackson**, J.P. Barnett, and R. Olatinwo. (In Press). *Evaluation of sowing methods to determine the role of hypocotyl extension in longleaf pine seedling development*. Tree Planters' Notes.
- **Jackson, D.P.** and D.N. Bowe. 2017. *Root growth potential of loblolly pine seedlings after defoliation to mimic browsing damage*. Tree Planters' Notes 60(2): 19-23.
- **Jackson, D.P.**, S.A. Enebak, J. West, and D. Hinnant. 2015. *Assessing tolerance of longleaf pine understory herbaceous plants to herbicide applications in a container nursery*. In Proceedings: Holley A. Gordon; Connor, Kristina F.; Haywood, James D., eds. 17th Biennial Southern Silviculture Research Conference, e-Gen. Tech. Rep. SRS-203, Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station: 265-271.

Advised/Mentored Student Research Presentations: 2014-2019

- 2019-**Nathan Bolner (Undergraduate-Oral)**-*Evaluation of Sowing Methods to Determine the Role of Hypocotyl Extension in Longleaf Pine Seedling Development*. University of Louisiana Systems Academic Summit, Grambling State University.
- 2019-**Nathan Bolner (Undergraduate-Oral)**-*Media Depth in Container Cells Affects Longleaf Pine Germination Rates*. 20th Biennial Southern Silviculture Research Conference, Shreveport, LA (First Place and overall most points of all undergraduate and graduate students).
- 2019-**Nathan Bolner (Undergraduate-Oral)**-*Evaluation of Sowing Methods to Determine the Role of Hypocotyl Extension in Longleaf Pine Seedling Development*. Louisiana Tech, Undergraduate Research Symposium (Third Place).
- 2019-**Nathan Bolner (Undergraduate-Poster)**-*Sowing Practices that Increase Longleaf Pine Germination Rates*. Louisiana Society of American Foresters Meeting, Pineville, LA (First Place).
- 2018-**Nathan Bolner (Undergraduate-Poster)**-*Influence of Container Color, Media Depth, and Subsequent Light Availability on Stem Elongation of Longleaf Pine*. Louisiana Tech, College of ANS Research Symposium (3rd Place)
- 2017-**Barrett Moore (Undergraduate-Oral)**-*Morphological Assessment of Longleaf Pine Seedlings to Understand Hybridization Patterns in Seed Crops over the Last Five Years*. Louisiana Tech, College of ANS Research Symposium.
- 2017-**Jacob Reichley (Graduate-Oral)**-*Effects of Plant Growth Regulators and Fertilizer Supply on Performance of Poinsettia Varieties*. Louisiana Tech University, Student Research Symposium.
- 2015-**Aaron Babers (Undergraduate-Poster)**-*Evaluation of Longleaf Pine (Pinus palustris) Seedlots for the Prevalence of Hybridization*. Louisiana Tech, College of ANS Research Symposium.

- 2015-**Jacob Reichley (Graduate-Oral)**-*Relating Christmas Glory® Poinsettia Growth to Applications of Nitrogen, Potassium, and Plant Growth Regulators*. Louisiana Tech, College of ANS Research Symposium.
- 2014-**Denise Bowe (Undergraduate-Poster)**-*Influence of Defoliation on the Root Growth Potential of Bareroot Loblolly Pine Seedlings*. Louisiana Tech College of ANS Research Symposium.

Selected Presentations: 2014-2019; in addition, 16 oral presentations and 2 posters (separate from student ones)

- 2019-**Jackson D.P.**, J.P. Barnett, R. Olatinwo, B. Strom, and S. Sung. *Field Observations of Longleaf Pine Seedlings to Determine the Extent of Hybridization*. 20th Biennial Southern Silviculture Research Conference, Shreveport, LA.
- 2019- Barnett, J.P., **D.P. Jackson**, and R. Olatinwo. *Hybridization of longleaf pine: Is there a growing problem?* 20th Biennial Southern Silviculture Research Conference, Shreveport, LA.
- 2018-**Jackson, D.P.**, N.G. Bolner, J.P. Barnett, and R. Olatinwo. *Evaluation of Sowing Methods to Detect Sonderegger Pine Seedlings*. Joint Annual Southern and Northeastern Forest and Conservation Nursery Association Conference, Pensacola, FL.
- 2016-**Jackson, D.P.**, R.K. Dumroese, D.J. Leduc, and J.P. Barnett. *Evaluation of Longleaf Pine Fertilization Treatments in the Nursery Nine Years After Outplanting*. Joint Annual Southern and Northeastern Forest and Conservation Nursery Association Conference, Lake Charles, LA.

Selected Funded Grants: 2014-2019; In addition, six Louisiana Tech Mini-Grants totaling \$4,031

- **Jackson, D.P.** *Evaluation of longleaf pine (*Pinus palustris*) seedlots for the prevalence of hybridization*. USDA Forest Service, Southern Research Station: Restoring and Managing Longleaf Pine Ecosystems Unit. Funded amount: \$53,388
- Adams J, N., N. Clay, A. Keith, **D.P. Jackson**, and G. Holley. *Cedar/Garlic Insect Repellant: Testing in a Controlled Environment*. Mr. Richard Fewell (Entrepreneur). Funded amount: \$34,598
- **Jackson, D.P** and R. Olatinwo. *Relating Substrate pH to Pathogen Populations, Causal Virulence, and Southern Pine Seedling Quality*. USDA Forest Service, Southern Research Station: Insects, Diseases, and Invasive Plants Unit. Funded amount: \$15,000
- Adams, H. and **D.P. Jackson**. *Development of a pollinator garden on Louisiana Tech's South Campus*. Lagniappe Ladies. Funded Amount: \$5,000

SELECTED SERVICE

Community: 2014-2019

- Organized and hosted a Private Pesticide Applicator's Certification Workshop at Tech in January of 2014, 2015, 2016, and 2017 where people took an exam in order to get licensed to become a private pesticide applicator.
- Organized and hosted a half-day Home Gardening Workshop at Tech in February of 2014, 2015, and 2016.
- Gave 3 oral presentations to train people associated with the Master Gardeners, National Advanced Silviculture Program, and State Pesticide Application Board.

University: 2014-2019

- Served on the University Senate (2015-18), Dean's Advisory Committee (2014-15), and Honors Council (present)
- Assisted with planning and implementation of the Noble Tree plantings on Tech campus
- Organized and administered the Area I FFA Horticultural contests (2014-2019) and the State FFA Agronomy contest (2015-2019) at Louisiana Tech.
- Assist with the annual Poinsettia and Livestock Scholarship Auctions.
- Faculty sponsor for Greenscape, the Plant Science club.
- Routinely available to meet with prospective students and parents, give guest lectures, and help with career fairs and any other departmental events.