



# PASSION PAVES THE WAY TO RECOGNITION

**A**s a child growing up, you are asked what you want to be when you get older. Most children answer the usual, fireman, teacher, just like my mom, etc. At the time, you do not think about working in a career you love, what you are passionate for or about loving what you will do for the rest of your life.

Things change when you enter the work force as an adult. You do not want to work and not be happy. You want to like what you are doing and have the opportunity to be passionate and rewarded for your dedication in the field.

Noureddine Abidi, Ph.D. had this experience growing up. He wanted to be a medical doctor, but growing up in a household with a mother who had never attended school and a father without higher educational experience, Abidi was flexible with his academic career and finally found a field he was fanatical for. So zealous that he has been awarded an extremely rare and prestigious award for any professor to travel to Europe with the Fulbright Grant. Abidi has received this award to collaborate with a Belgium university within the textiles department because of his dedicated research with cotton.

"When you grow up, sometimes you go basically with the wind," Abidi said jokingly. "I did my B.S. and M.S. in Morocco in chemistry, and then I went to France. That is where I did my Ph.D. But really, it was more of going with the wind then trying to decide where I wanted to go."

After taking some classes in his undergraduate career, Abidi decided to abandon the idea of becoming a medical doctor and take up a different field. He enjoyed the scientific classes but still claims he floated impulsively during those years.

"I didn't choose chemistry just because I like it," Abidi said. "But when you start doing things, as long as you are happy and you like what you do, it comes easy."

With a field in mind and a direction to go, Abidi started developing a love for chemistry and the world around him. He officially graduated from the University of Montpellier

II as a polymer chemist, which led him to discover his passion and what would be his life long career and success in the cotton industry.

"I am a polymer chemist so I can make polymers in the lab. So, I take a + b + c + d [four different elements], I can make them into a completely new product," Abidi said. "But, I was always intrigued how nature is taking those nutrients and making a polymer on the tree [originally found in nature], and that is what starting my thinking, how this is possible."

He had found his driving force within the field and the world now he just needed to be close to that desire.

"You cannot do cotton without coming here, and it was a good decision to come to Lubbock, what 16 years ago or something, almost 17 years ago," he said with a far off look in his eyes.

**"As long as you are happy and you like what you do, it comes easy."**

It was September 1999 in which Abidi moved to Lubbock and began his years of hard work and dedication for the field. Abidi is the associate director of the Fiber and Biopolymer Research Institute (FBRI), which is housed under the department of plant and soil sciences in the College of Agricultural Sciences and Natural Resources at Texas Tech University. At the FBRI, Abidi has been able to experiment more and examine the chemistry behind the staple crop in Lubbock.

"I use my knowledge of chemistry and I apply that to cotton," Abidi said. "Everything I do here is around cotton."

With big projects working with fiber from Bayer Crop Science, Abidi said he gets to use chemistry to examine the fibers. He looks at the relationship between the chemical makeup and cellulose of the fiber and compares those results to other properties within the fiber.

Abidi said he uses his knowledge and expertise to improve the cotton for the farmers. With the combined projects with Bayer Crop Science, farmers will send in cotton that has had a genetic alteration to help improve the cotton weather for water resistance, maturity, or microbes within the cotton. Through a series of labs, tests and practical application, the cotton is examined and reported back to the farmers.

Abidi excitedly explained some of the projects currently being worked on at the FBRI. The first he gladly pointed out was a way to turn cotton fibers into a gel substance that could be used to help patients heal from burns without having to change bandages daily or even weekly. Another project in progress is trying to make woven cotton water resistant and substance resistant. Students and faculty are also working to prevent cotton waste and use all of the cotton and use it well.

Abidi is leading the way with innovation at the FBRI through his patent for cotton stickiness. The stickiness comes from a pest disturbing the sugar content in the cotton and can render cotton, even whole fields, useless.

Eric Hequet, Ph.D., department chair for plant and soil sciences commends Abidi on his research with the FBRI and Texas Tech.

"His scientific intuition and creativity are significant and he is tenacious," Hequet said. "His pioneering work in several research domains has been well received in the scientific community."

Abidi showed great passion and excitement for his travels with the Fulbright program. He received a rare placement in Europe and he said he believes he is the only awardee from Texas Tech this year. Within his placement, Abidi will have the opportunity to both teach and conduct research and he said he is hoping to build more collaboration overall.

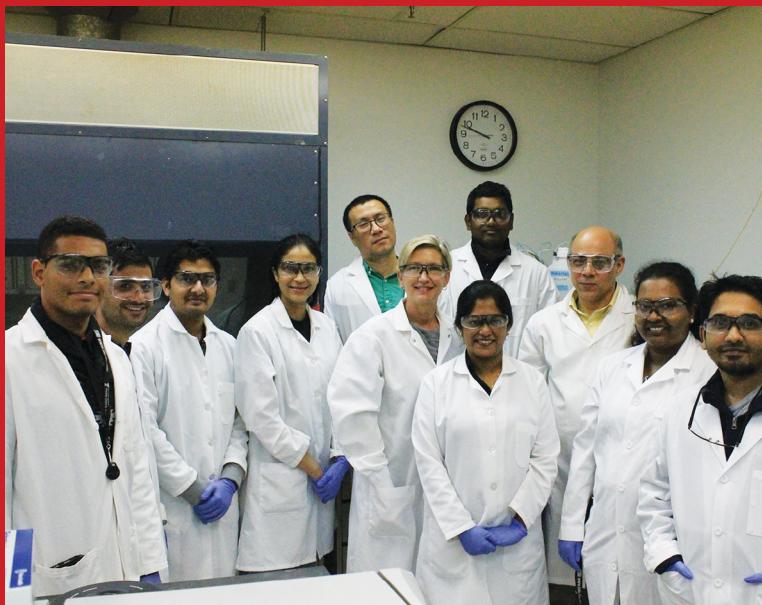
"In five months, you can't do much with research," Abidi said. "I think my main goal is to establish collaboration between Belgium and Lubbock. I think it would be nice to establish this transatlantic collaboration to see if we can get some money for that."

While he started his career with a "fly by the seat of your pants" attitude, Noureddine Abidi has found a field he loves and can work in the rest of his life.

"I am so excited about the path my research is taking me. I think I am contributing to the success of Texas Tech University to become premier research university," Abidi said. "Adding value to West Texas cotton is my driving force." 



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*The student researchers and faculty members of the Fiber and Biopolymer Research Institute use different processes and experiments to examine cotton grown across the nation and the state.*

