"It looks like I'm special, but I'm not. I'm no different from anybody else"

Dr. Hadiyah-Nicole Green

Dr. Hadiyah-Nicole Green is one of fewer than 100 black female physicists in the US. She earned her master's and Ph.D degrees at the University of Alabama at Birmingham.
Dr. Green recently was awarded with a $1.1 million grant to further develop her patent-pending technology for using laser-activated nanoparticles to treat cancer.

It's tempting to see Dr. Green for all the ways that she is unusual - for winning a large grant at a relatively young age, and for being black and female in a field dominated by white men - but it's not something she said she thinks about in her day-to-day life.

"It looks like I'm special, but I'm not. I'm no different from anybody else. When opportunity found me, I was prepared."

Close to home
Dr. Green grew up in St. Louis with her aunt and uncle, General Lee Smith and his wife, Ora Lee.

When Ora Lee was diagnosed with cancer, she refused the treatment because she didn't want to experience the side effects. Three months later, Dr. Greens uncle was diagnosed with cancer.

"I saw first-hand how devastating it was, and I could understand why my aunt didn't want to go through that."

Dr. Green earned a bachelor's degree in physics with concentration in fiberoptics, and then a full scholarship to UAB. She got the idea to use lasers to treat cancer without the side effects of chemo and radiation.

The new cancer treatment?
Dr. Green had spent seven years during her master's and doctoral programs at UAB, developing a way to target cancer cells - not the healthy cells around them.

"I'm really hoping this can change the way we treat cancer in America."

"There are so many people who only get a three-month or six-month survival benefit from the drugs they take. Then three or six months later, they're sent home with no hope, nothing else we can do. Those are the patients I want to try to save, the ones where regular medicine isn't effective for them." said Dr. Green.

Dr. Green's technology involves nanoparticles that can detect cancer cells, and a laser. Apart from each other they are harmless. This treatment has already seen success in mice.

The importance of Role models
Dr. Green always makes time to speak at schools, Boys & Girls Clubs and other youth events.

"Usually if there is an invitation to speak at a forum like that, I accept it because I feel like it's a responsibility," she said. "There are so few of us (black women in STEM fields) I don't feel like I have the luxury to say I'm too busy."

Dr. Green said she feels a responsibility to be a positive example

and change stereotypes of black women portrayed in media.

"There are black female scientists who don't get media exposure. Because of that, young black girls don't see those role models as often as they see Beyonce or Nicki Minaj. It's important to know that our brains are capable of more than fashion and entertainment and music, even though arts are important."

Green has mentored several young women, many of whom have gone on to receive degrees and jobs in science-related fields.

"It takes a village to raise a child," she said. "I repeat that because a village of people helped raise me and instill values in me, and encouraged me to get to this point. I did not get here by myself. Because of that clarity, I know my responsibility to encourage and mentor the next generation."