

Dr. Lonnie Johnson delivered the keynote address to kick-off of Engineers Week in conjunction with Black History Month at WCU on Monday February 19. A large crowd of students and visitor filled the A.K. Hinds University Center Grand Room to hear Dr. Johnson speak about “The Impact of Innovation.”

Not only did Dr. Lonnie Johnson invent the Super Soaker®, he is a real rocket scientist. Dr. Johnson described salient experiences focusing on goals, achievement, and perseverance during his engineering experiences. Lonnie’s innovation began during his childhood and continued through his career with the US Air Force and the Jet Propulsion Laboratory. As a young rocket scientist and researcher, he set a goal to build his own rocket engine in place of commercially available Estes® rocket engines. Lonnie visited the library, researched rocket fuel, and developed his recipe. With a formula in hand, his inventory contained all but a single ingredient. This one elusive chemical component remained a mystery until a serendipitous errand to the local pharmacy. While waiting for the pharmacist to complete his moms prescription the ever-inquisitive Lonnie roamed the stored examining all the chemicals inventoried. There it was, mystery solved, the missing ingredient sitting on the shelf right before his eyes. Dr. Johnson did not reveal the chemical given a few young children in the audience. Never give up!

All innovation demands accommodating environment and encouraging support. Young Lonnie proceeded to make batches of rocket fuel in his laboratory, which happened to be the family kitchen the accommodating environment. While formulating an endothermic batch of rocket fuel, otherwise known as heating it on the stovetop, sparks ignited resulting in a smoked filled lab, I mean kitchen. When Dad came home, he advised Lonnie to relocate outdoors when mixing the next batch using a newly provided hot plate. Persevering through adversity and failure leads to innovation.

Another salient aspect of the “Impact of Innovation” Dr. Johnson declared is “Technology is free if you create it.” Envision your goals and focus on accomplishment and not time to completion. Dr. Johnson also compared and contrasted Saturn V’s journey to the moon and Christopher Columbus’s excursion to America in both time and distance using scaled cartoons of each vessel. Highlighting the accelerated rate of time technology is advancing.

Dr. Johnson used revenue to fund his current research projects including advanced battery technology and a thermodynamic energy converter to transform heat into electrical energy called Johnson Thermoelectric Energy Conversion (JTEC). Learn more about JTEC and Lonnie Johnson at <http://johnsonems.com/>

Western Carolina University  
welcomes

# Dr. Lonnie Johnson

*Inventor of the Super Soaker*



## The Impact of Innovation

Monday, February 19 | 6 p.m.  
UC Grand Room

DISCOVER   
ENGINEERS WEEK  
FEBRUARY 18-24, 2018

BLACK  
HISTORY  
MONTH

Free Admission and  
Open to the Public

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