



Fourth wave of black innovation set to transform global economy

WASHINGTON -- A fourth major wave of innovation from African-Americans will drive careers and markets in the 21st century, participants in the 11th annual 50 Most Important African-Americans in Technology symposium at the historic Lincoln Theatre in Washington, D.C.

The Honorable Anthony W. "Tony" Miller, Deputy Secretary, U.S. Dept. of Education, laid out the competitive challenge during a keynote speech at INNOVATION & EQUITY: Spurring Manufacturing Through Innovation in Black Communities. Miller said the Obama administration had prioritized investments in education and broadband access in order to prepare Americans for a world in which other nations were spending 30 percent of disposable income on education.

A vigorous roundtable discussion between Miller and 50 Most selectees addressed how best to provide science, engineering and mathematics education to African-American students. On stage with him were Drs. Carmella Morton, President of Rise Academy School of Science and Technology in Ft. Lauderdale, FL; Dr. Stephany Jean Head, President of OpRisk Associates in Reston, VA and Dr. Carol Espy-Wilson, professor of engineering at the University of Maryland-College Park. They urged Miller to address structural barriers in grade school and higher education to increased African-American admission and graduation. Head related how a faculty member told her that a black woman would never get a Ph.D as long as he was on the faculty. She proved him wrong.

Dr. Lonnie Johnson, President of Excellatron LLC, urged the administration to encourage students to become inventors and creators instead of just consumers of technology. "Once a student has the feel of success, it stays with them for a lifetime." Johnson invented his first robot while in high school and has since gained 80 patents with applications for 20 more.

Johnson is not an anomaly, pointed out John William Templeton, executive editor of blackmoney.com and founder of the 50 Most Important African-Americans in

Technology in an opening presentation on African-Americans in technology drawn from Silicon Ceiling 10: Equal Opportunity and High Technology. Templeton said black innovators had transformed the industrial age in the late 19th century with the inventions of Louis Latimer, Elijah McCoy and George Washington Carver; shaped bioengineering and chemistry in the first half of the 20th century with the advances of Dr. Percy Julian and Charles R. Drew; and laid the foundation for high technology through innovators like Roy L. Clay Sr., Dr. Frank Greene and Jerry Lawson.

Currently, 1,000 blacks per year gain patents like Johnson, Espy-Wilson and Head. To turn those projects into industries takes specialized expertise. Darrell G. Mottley, President-Elect of the D.C. Bar and a principal shareholder in the intellectual property law firm of Banner Witcoff, described the life cycle of intellectual property in a speech on Creating Value From Innovation. Entrepreneurs followed up with questions about how to position their discoveries in order to retain ownership and raise capital.

Daryn Dodson and Jean Luc Park, venture capital consultants to the board of the \$15 billion Calvert Investments, told how to attract investment capital. They are spearheading an initiative that uses 3 percent of the socially-responsive investment house to seed companies which make a social impact as well as a profit.

Johnson told how he intentionally placed his factory in downtown Atlanta to create jobs in depressed neighborhoods, a model followed for the past 30 years by Rod-L Electronics, founded by Roy Clay Sr. He told of the different attitudes he is seeing between American venture capitalists, who are retrenching, and foreign investors, who are ready to pounce on his technologies.

The two major advances coming from Excellatron are an engine which converts the sun's heat into energy and a lithium-air battery which can power a car for 1,000 miles at a charge. When asked how Facebook's Mark Zuckerberg could get \$500 million in new investment from Goldman Sachs, but Excellatron was not attracting venture capital from American investors, Johnson replied that he didn't have a good answer.

His fellow energy panelist, Ralph Cleveland, executive vice president of AGL Resources, said Johnson was addressing two of the emerging energy opportunities. As immediate past chair of the North American Energy Standards Board, Cleveland is helping define

the standards of energy use in buildings, vehicles and appliances. As first vice chair of the American Association of Blacks in Energy, he is also concerned about justice in resource utilization, particularly from his travels on the African continent.

Cleveland told of a meeting with a South African cabinet minister who said his country was the number one gold miner, diamond miner and chromium producer, but to get a diamond ring for his wife, he had to import it. Cleveland said the value chain has to be moved closer to the countries that provide the resources, so that they profit more from finished goods and downstream distribution.

Charles Johnson, general manager of mobile advertising at Microsoft, described the opportunities from increased speed from broadband distribution. His unit places advertising with mobile applications that run on the smart phones carried by 25 percent of the U.S. population, a proportion which will grow geometrically. He encouraged applications which fulfill the functions once done by phone directories and encyclopedias. Johnson also said mobile applications and gaming are valuable tools for education because the new generation is accustomed to the devices.

To follow up on the theme of this fourth wave of innovation, Templeton will keynote the Innovation Generation Congressional Digital Civil Rights Forum on Friday, Jan. 21 at 3 p.m. in the Cannon House Office Building, Room 121, as part of the Minority Media and Telecommunications Council's Broadband and Social Justice Summit.