



*Dr. Monica F. Cox*

**Speaker • Educator • Entrepreneur • Pioneer**



## About Dr. Cox

Dr. Monica F. Cox has come a long way from her southern roots in the small town, and we really mean small town, of Newville, Alabama (population 533, at last count).

The only child of a first-grade teacher and a K-12 administrator – both who grew up in the Jim Crow South - it's probably not a surprise that Dr. Cox landed a career in academics. However, her road to a career in the Science, Technology, Engineering, and Mathematics (STEM) world didn't follow the traditional path.

First off, she's a woman. Secondly, she's African-American. And unlike many who excel in advanced STEM careers, Dr. Cox didn't attend a school that offered Advanced Placement STEM courses or even basic Calculus. Picking up on their daughter's interest and aptitude for STEM, Dr. Cox's parents enrolled her in engineering summer programs for high school students and in community college classes at the age of 16. By her senior year of high school, she landed the coveted honor of valedictorian and graduated with enough college credit to be classified as a college sophomore after graduation.

After high school she set her sights on the big city and bright lights of Atlanta, Ga., where she obtained a full scholarship to Spelman College within NASA's Women in Science and Engineering (WISE) program. She received her Bachelor's degree in mathematics from Spelman College, earned her master's in industrial engineering from the University of Alabama, and her Ph.D. in Leadership and Policy Studies from Vanderbilt University. All three degrees were earned debt free.

As if that weren't enough feathers in her cap, after six years as an associate professor in the School of Engineering at Purdue University in West Lafayette, Ind., in 2011 Dr. Cox became the first African-American female professor to earn tenure in the College of Engineering at Purdue. Three years later, she's still the only one. In 2008, she earned a Presidential Early Career Award for Scientists and Engineers (PECASE), the highest honor bestowed by the United States government on outstanding scientists and engineers in the early stages of their independent research careers.

Simply put, Dr. Cox is a modern-day pioneer. In addition to educating some of the best minds in the country at Purdue, Dr. Cox is steadfastly and successfully helping others become pioneers in their respective fields through her business, STEMinent LLC and her "Prepared to Be a Pioneer" program.





## *Prepared to Be a Pioneer*

Prior to becoming a faculty member at Purdue University, Dr. Cox didn't realize that she would become a pioneer.

After all, she is:

- An only child of parents who grew up in the Jim Crow South
- A graduate of a Historically Black College (Spelman College)
- A mathematician
- An engineer
- An entrepreneur
- Young
- Humorous
- Opinionated
- Driven

Put this package into a faculty position in a male-dominated field, and fireworks are sure to fly! Prepared to Be a Pioneer grew from her experiences in this, her first full-time job.

In the last 10 years, Dr. Cox has graduated 8 Ph.D. students, published approximately 100 publications, garnered over \$10 million in research funding, and earned a Presidential Early Career Award for Scientists and Engineers (PECASE). This road has not been an easy one to travel. When new experiences occurred (e.g. people confusing her with the only other black female engineering professor in a faculty meeting or people mistaking her for the black female custodian in the building), she did not know what to do. She wanted to talk to someone about whether she was being oversensitive, whether she should provide teachable moments, or whether she should just ignore the comments. Over time, the professional demands of her academic job, coupled with these little incidents, started to affect her mental and physical health.

Although she's been extremely successful ([www.i2e2a.org](http://www.i2e2a.org)), this success has not come without many tears and some frustration.

After earning tenure, she vowed to serve as a mentor and a consultant to others who were thinking about entering an environment where they would be the first or the only. Rarely does one enter a profession with a toolkit for being successful professionally and personally, particularly as an underrepresented minority. Dr. Cox is helping to change that.

In 2013, she started her own business (STEMinent LLC), created an animated STEM YouTube series (Quirky Time), entered the fashion business, and obtained a contract to write a book about the demystification of the engineering Ph.D. She is walking in her heart's desire of sharing the lessons she has learned with others. Dr. Cox has spoken to thousands of undergraduates, graduate students, and faculty who want it all - family, professional success, good health, happiness, and peace.





## *Pioneer Continued.....*

Although Dr. Cox's motivational messages, mentorship, and services are available for anyone who wants to advance in his/her life or career, she specializes in working with what she calls Pillars, Propellers, Prisms, and Pioneers.

### *Pillars*

Pillars are leaders who are the backbones of organizations. Without them, an institution crumbles. Although many people want the fame that comes with being at the forefront of an organization, they often don't want the responsibility of leadership. Leaders can be made. Allow Dr. Cox to mentor you as you pursue a path of leadership. Learn how to develop short-term and long-term goals that will guide you toward your career goals while connecting you to your followers. You will also learn how to exude confidence along the way.



### *Propellers*

Propellers are accelerators. Without them, momentum is lost. Although many people think that feistiness or authenticity has no place in professional environments, nothing can be further from the truth. Unfortunately, society attaches stereotypes to certain groups of people. As a minority woman who has succeeded in a male-dominated profession, Dr. Cox can help you to retain your authenticity and to manage conflicts while getting results. After all, no one should sacrifice or abandon who they are for a job.

### *Prisms*

Prisms are known for refracting entering light and for producing new representations of this light. Via their transparency, they redirect light, creating a combination of colors that together form a beautiful outcome. Taking what you are given and turning it into something completely different can be challenging. Dr. Cox can guide you as you embark on new tasks that require you to engage with existing entities that might need to be reframed in an effort to produce positive, desirable, long-lasting results.

### *Pioneers*

Pioneers establish themselves in uncharted territories or in places that have never been occupied. They build creations for which there are no blueprints. When pioneers start their journeys, they often do not realize the difficulties that lie ahead of them or the differences that they will make in the lives of others. Because pioneerism can be overwhelming, Dr. Cox can help you and others in your organization who want to develop strategies for paving new paths and reaching their destinations successfully.





# *Presentations*

If your company, organization, civic and educational institution, conference, charity or weekend/weeklong workshop is seeking a dynamic, humorous, real and motivational speaker, Dr. Cox delivers that and so much more. She uses her inspirational personal story - the good, the bad, and the ugly - to help change lives, and to provide the motivation and clarity to move to the next level in the workplace, the boardroom, the classroom, and the world. Dr. Cox has an uncanny and unique ability to connect with every audience - from youths to adults, and corporate leaders to support staff.

Dr. Cox offers presentations, workshops, or seminars on a variety of topics. Infused in each topic are real stories about her journey and about ways that she has overcome personal and professional challenges to achieve success.

Topics include, but are not limited to, the following:

- Transitioning to an unknown or unfamiliar setting while staying focused and achieving your goals
- Getting off to a quick start as an undergraduate, graduate, or faculty member
- Developing short-term and long-term goals to achieve superior results
- Remaining authentic and professional while blazing a trail for which there is no roadmap
- Becoming a proven leader in your area of expertise
- Creating a social media platform to develop your professional brand
- Living life to the fullest, independent of predefined or stereotypical boundaries and expectations
- Networking for maximum impact



*\*Presentations are tailored to customer needs and are available in a keynote, half-day, and full-day format.*



## *Honors & Awards*

- Purdue University College of Engineering Faculty Award of Excellence for Leadership (2014)
- Purdue University Entrepreneurial Leadership Academy Fellow (2013)
- Purdue Black Graduate Student Association (BGSA) Engagement Award Recipient (2013)
- Presidential Early Career Award for Scientists and Engineers (PECASE) Recipient (2008)
- Diverse Issues in Higher Education Emerging Scholar (2008)
- National Science Foundation Early Faculty CAREER Award Recipient (2007)
- National Academies of Engineering/Center for the Advancement of Scholarship in Engineering Education New Faculty Fellow, Frontiers in Education Conference (2006)
- Purdue University Teaching for Tomorrow Award Recipient (2006-2007)
- Vanderbilt University Department of Leadership, Policy, and Organizations Graduate Student Representative (2002-03)\*
- VaNTH Engineering Research Center Student Leadership Council Chairperson (2001-2005)
- Vanderbilt University Posse Foundation/Dean's Graduate Fellow (2000-05)
- University of Alabama Graduate Council Fellow (1999-2000)
- University of Alabama National Alumni Association Fellow (1998-99)
- NASA/Graduate Degrees for Minorities in Engineering and Science (GEM) Scholar (1998-2000)
- Spelman College NASA/Women in Science and Engineering (WISE) Scholar (1994-98)

## *Academic, Professional & Scholarly Societies*

- Tau Beta Pi (Engineering Honor Society)
- Alpha Pi Mu (Industrial Engineering Honor Society)
- Alpha Epsilon Lambda (Graduate School Honor Society)
- Pi Mu Epsilon (Mathematics Honor Society)
- Mortar Board (Senior National Honor Society)
- Golden Key (Junior/Senior National Honor Society)
- American Society for Engineering Education, Member
- National Society of Black Engineers, Member
- American Education Research Association, Member





## Contact/Booking Information

If you would like to learn more about how to book STEM expert Dr. Monica F. Cox, log onto her website [www.preparedtobeapioneer.com](http://www.preparedtobeapioneer.com).

You may also contact Dr. Cox's PR/marketing representative:  
Shelby Roby-Terry, The Forty Group LLC  
(317) 414-6594 or [shelby@thefortygroup.com](mailto:shelby@thefortygroup.com)

Want to follow Dr. Cox online, check her out on:



Twitter (@monicafox)

You can also learn more about her work in STEM research and her crew of researchers, The Quirky Time Gang, on:



Facebook ([www.facebook.com/quirkytime](http://www.facebook.com/quirkytime))



Twitter (@quirkytime)



Youtube at The Quirky Time Gang

