



## WOMEN TO WATCH —OR— WONDER WOMEN?

ONE AND THE SAME,  
IF YOU ASK US.

THIS YEAR BRAVA CELEBRATES **30 INSPIRING WOMEN** WHO WILL MAKE A POSITIVE IMPACT UPON THE LIVES OF OTHERS AND OUR COMMUNITY IN 2015.

EACH WOMAN TO WATCH IS WORKING TO RAISE UP WOMEN AND CHILDREN AND TO HELP THE VULNERABLE, MARGINALIZED AND DISENFRANCHISED. THEY ARE SPEAKING UP—WITH SPIRIT. THEY ARE CLOSING GAPS AND ELIMINATING DISPARITIES THAT DIVIDE US. ULTIMATELY, THEY ARE CHANGE AGENTS HARD AT WORK BUILDING A MORE EQUITABLE FUTURE AND A BETTER, HEALTHIER MADISON THAT'S FILLED WITH OPPORTUNITY—RIGHT NOW.

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PHOTOGRAPHY BY HILLARY SCHAVE, AZENA PHOTOGRAPHY

IN 2010 MINORITY WOMEN  
WERE AWARDED ONLY  
**10.6% I** OF BACHELOR'S DEGREES  
IN SCIENCE AND ENGINEERING  
**7.9% I** OF MASTER'S DEGREES IN  
SCIENCE AND ENGINEERING  
**3.9% I** OF DOCTORATE DEGREES  
IN SCIENCE AND ENGINEERING

— NATIONAL SCIENCE FOUNDATION, 2013

## ANGELA BYARS- WINSTON

### BREAKING DOWN BARRIERS IN SCIENCE

AFTER A HEART EVENT nearly took her life at age 37, UW-Madison Department of Medicine Associate Professor Angela Byars-Winston found her “be attitudes:” Be grateful, be authentic and be present.

Almost eight years later, Byars-Winston focuses on these in all aspects of her life, including her family, actively worshipping at Mt Zion Baptist Church and her work to create paths for women and racial and ethnic minorities in the fields of science, technology, engineering and mathematics (STEM). She and a team of researchers recently received a large grant from the U.S. government to tap into this population, and the individuals who are mentoring them, to develop the next generation of scientists.

“My role is to identify interventions and assessments that can promote cultural diversity and awareness for research mentors,” she explains. “I believe we should bring the same scientific approach to mentoring that we do to the science that we’re mentoring about.”

For this researcher/counseling psychologist, it all comes down to simple math. The Department of Labor defines STEM fields as 5 percent to 10 percent of the labor market, but those occupations account for 50 percent of our economic growth. “We have a growing population of women and minorities, but they’re not historically participating in these fields,” Byars-Winston says. “I want to help equip them to at least be in the running to be a part of that world.” —Emily Leas



## KATIE BRENNER LEADING FUTURE SCIENTISTS

KATIE BRENNER KNOWS that science is hard. But she wants to be the scientist who talks to a room of students about microfluidic research, and sees eyes light up with curiosity, instead of glaze over with boredom.

Using research she’s doing in her lab at UW-Madison Department of Biochemistry, Brenner created a series of experiments for students at Beaver Dam High School. Her own research—recently awarded a L’Oreal Grant for Women in Science Fellowship—analyzes the chemicals in urine of pre-term babies to find acute infections sooner. The high school outreach program takes the basics of this research and allows students to question, discover and see what it’s really like to be a scientist.

“I think there’s a problem with the communication about what science really is,” says Brenner, who is a postdoctoral fellow. “You can love answering questions, helping people and changing lives, and be a scientist. You don’t have to love complex math problems.”

In addition to expanding this program to Madison-area schools in 2015, Brenner will continue her work mentoring students in her lab, a task she considers a privilege and a critical aspect of developing scientists of the future. —Emily Leas