Jane Cox
on LEDs, lighting design and the role of light in storytelling

By Catherine Zandonella
WHEN PRINCETON'S NEW LEWIS ARTS COMPLEX was under design, Jane Cox was one of the primary advocates for going all-LED in the new theatrical performing spaces.

"It was a risk to go to all LEDs because the technology for entertainment is changing fast, but the decision was for Princeton to be at the forefront of energy efficiency in design," said Cox, director of the Program in Theater and a senior lecturer in the Lewis Center for the Arts. "We also decided that our basic lighting systems should be automated for maximum flexibility, and are betting on the sophistication of our students to learn to engage with these systems and maximize their potential."

With the opening of the new complex, Cox will oversee one of the first all-LED theaters in an educational setting. Automated LED lights provide versatility in creating different lighting states and they consume vastly less power than traditional light sources.

The lighting systems also honor the vision of Cox's predecessor as director of the theater program, Tim Vasen, who died in 2015. "Tim loved to push boundaries and embrace technology," she said. "I think he would be happy to see what has been accomplished."

Cox has created lighting designs for theaters from London to Los Angeles and has twice been nominated for a Tony Award for her lighting designs in Broadway productions.

"Learning to work with light as a form of creative expression means learning how light functions, how we see it and how we relate to it," Cox said. She was drawn to lighting design while studying music as an undergraduate at the University of London, and she finds many parallels between lighting and music.

"Both lighting and music are about temporal relationships," Cox said. "Everything is experienced in relationship to what you just heard or just saw. Light is experienced in time, and has a harmony and a melody. Changes in light are experienced physically, and can profoundly alter the relationship between the performers and the audience," she said.

Light's color, angle, intensity, movement — each can bring meaning to a character's lines and arouse emotions in spectators. For example, for a 2016 production of New York Theatre Workshop's Othello starring Daniel Craig and David Oyelowo, Cox lit the set using only contemporary military lighting gear. "It is hard to put into language the psychological impact of sharing a space lit with emergency lights or by red headlamps," she said.

With the new theater lighting, Cox is excited to be able to explore with her students ways that technology can enhance person-to-person interactions. "I'm in theater because I am interested in what happens when we put people in a room together," she said.

Our response to light infuses the art of visual storytelling, whether it is in a play, a film, a video game or virtual reality, Cox said. "Our relationship to light is so primal. Light is one of the first things we experience in life," she said, "so it is no surprise that it is integral to how we experience theater."