



# THE SUN KING

Sculptor uses glass to reflect on life and art in Unified Science Center

by Susan Allen '09

Upper Brett and Iva Fabrikant gently unboxed hundreds of thin wire strands strung with glass squares this past summer in the Unified Science Center lobby. Each string glistened in the sunlight as Ray King's assistants attached them to a pulley and guided them upward to King, who was harnessed into a lift.

The suspended prisms dangling from the ceiling make up the *Stockton Wave*. The glass pieces work together to catch the sunlight from all directions as the installation collectively "twists in space and flies back up to the ceiling," explained King.

"It's intended to animate the lobby when the sunlight comes in in the morning," he added.

King, who splits his time between his Philadelphia studio and his Stockton, New Jersey farm, works with glass, metals and cable constructions, but light is the key element that infuses life into his art.

"I'm playing with the sun as a partner," he said.

Using the sun and glass, King created two masterpieces, the *Stockton Wave* and *Sun Sails*, which bring the science of optics to light in a public space. King's *Sun Sails* installation is a series of glass sails that are mounted to the outside of

the building using a cable structure that mimics the techniques American architect and author Buckminster Fuller used to build his inventive structures. The cables King used were originally developed to engineer the Brooklyn Bridge.

The installations at Stockton function as breathing bodies of art. The colors and shadows transform continuously from sunrise to sunset. "(They're) made for dynamic interaction and not viewing once, but viewing [them] over the course of the day."

Beyond the beauty that the eye first sees are the scientific and historic connections to southern New Jersey that his art celebrates.

"The *Sun Sails* uses diffraction of light: that is taking white light from the sun and via a very microscopic series of micro-grooves in an aluminized film, diffracts or splits the light into color," said King.

In the 1780s, American astronomer, mathematician and inventor David Rittenhouse became the first to create a diffraction grating, which splits light into beams that travel in different directions.

"Stockton, (the signer of the Declaration of Independence for whom the college is named) and Rittenhouse

may have crossed the same pathways in Philadelphia in that time when politics and science were active," said King.

"I'm using the same phenomenon of diffraction—just using more technical materials and using it as an artistic form," said King.

"New Jersey was the place where glass was first made in the colonies because of the predominance of sand to melt glass," he said. Glass is one of the primary materials he used for both pieces, creating a strong connection to the Pinelands' sandy soils.

King says he was born an artist, always making creations as a child, but he was rejected by art school. He moved on to study in England with Patrick Reyntiens and has since become an internationally acclaimed artist known for his scientific and mathematical visions.

"Art takes three things: talent, luck and perseverance. When you get knocked down, don't let it break you. It might seem daunting, but it's a continual process," he said.

Generations of budding scientists will view his work at Stockton.

"I hope it's an inspiration for scientific discovery," said King.

