You know the stereotype: the frizzy-haired old man, resting on the laurels of past discoveries, pontificating from the academic ivory tower.

Like most stereotypes, this is laughable. If scientists have bad hair days, it's because they've been busy searching at the dark edges of knowledge. The best science doesn't just provide answers; it provokes questions that we never would have thought to ask.

This is where the connection between science and art is tightest. My good friend, artist John Sabraw, says that art, too, should deal with questions.

"Artists probe the mysterious. Art itself is a record of the struggle to understand mysteries and the questions that arise in the process," he said.

Almost two years ago, John asked my wife, astronomer Mangala Sharma, and me to collaborate on a large art installation, called SCALE, that would probe the connections between astronomical concepts of hugeness and human perceptions.

"In SCALE, viewers are invited to re-examine and ultimately construct a new sense of their own significance in the context of this vast universe and the rich beauty of the art surrounding them," Sabraw said.

Astronomy pushes us to comprehend scales beyond human experience.

Take a billion. A billion is a million thousands. A billion seconds is 32 years.

One of my contributions to SCALE was to design a multipanel curtain that contains 1 billion stars. That represents just 1 percent of our home galaxy, the Milky Way.

The observable universe contains a hundred billion galaxies. A grain of sand held at arm's length can obscure tens of thousands of them. What will seeing this in a work of art do to a human's perception of reality?

SCALE is on exhibit until Dec. 16 at the Kennedy Museum of Art in Athens. For more information, go to www.ohiou.edu/museum or call 740-593-1304.

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