

Making

Math

Child's

Play

GLEN WHITNEY, A PH.D. AND HEDGE-FUND VETERAN, HAS RAISED \$23 MILLION FOR A MUSEUM THAT AIMS TO GET U.S. KIDS EXCITED ABOUT MATH.

BY PATRICK COLE

WHEN HE WAS 14, A RESTLESS GLEN

Whitney desperately wanted to escape the boredom of suburban life in Linden, New Jersey. He created his own ticket out of town by asking his parents to send him to summer math camp at the Ohio State University, even though he didn't find the subject all that stimulating. "Math wasn't something that excited me

while going through school," says Whitney, who looks younger than his 42 years.

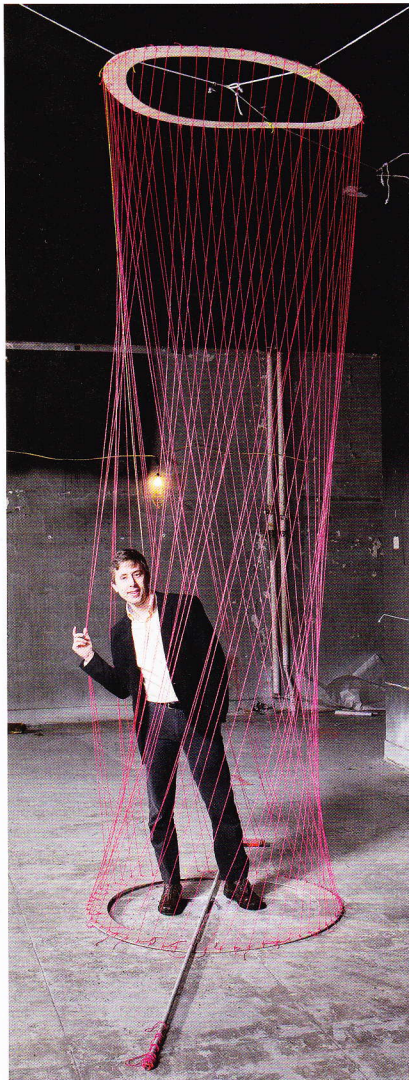
The camp changed that: Whitney left mesmerized by numbers and formulas and found his calling. He earned a bachelor's degree in mathematics from Harvard University in 1989 and then a Ph.D. from the University of California, Los Angeles. After teaching at the University of Michigan, he became an algorithm manager at Renaissance Technologies LLC, the quantitative hedge fund started by Jim Simons.

Now, Whitney wants to spread his love of numbers to children—and their

parents—by opening a New York museum dedicated to mathematics. “We need an institution like a Museum of Mathematics,” Whitney says one morning in the raw space under construction on East 26th Street in Manhattan, which will open to the public this summer.

Math helps people fulfill their roles in society, whether it’s understanding a budget or deciding whether to buy a lottery ticket, Whitney says.

“We want math to be colorful and vibrant and dynamic,” he says. Those are qualities that are often hidden in the way the subject is presented to most people in school, he says. The need is especially strong in the U.S., where students score below those of many other developed countries on standardized



math tests. In a 2009 survey, the most recent available, the Organization for Economic Cooperation and Development found that U.S. students lagged behind those in more than 20 other nations, including China, New Zealand and Finland.

Whitney, who left his job at Renaissance to create the museum, was galvanized into action when the tiny Goudreau Museum of Mathematics in Art and Science, housed in two rooms in a former community center in New Hyde Park, New York, closed its doors in the fall of 2006 because of a lack of funding. So far, he has raised \$23 million from donors such as Simons, Google Inc. and the Alfred P. Sloan Foundation, founded by the former chief executive officer of General Motors Corp.

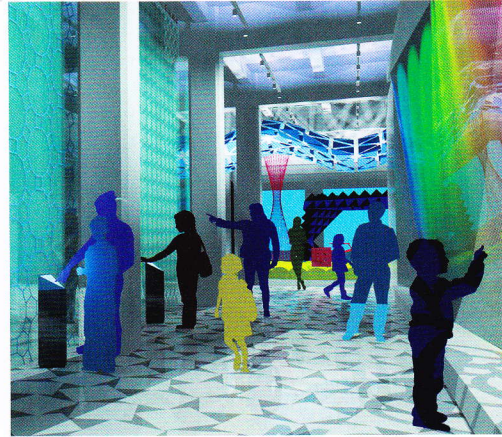
The museum, which Whitney calls MoMath for short, won’t be aimed at math nerds. There will be no exhibits of an abacus or outdated calculator under glass. Instead, Whitney says he aims to make math cool by letting museum-goers see and touch mathematical concepts. “The people we want to reach most urgently are kids in grades four through eight,” he says. “That’s the period when the social atmosphere about math changes, and we want to get in there and help people who are excited about mathematics stay excited about mathematics.”

In one exhibit, a hyper-hyperboloid, a web of straight red strings, creates the illusion of a curved cage. After entering the cage, visitors can plainly see that the straight lines around them can create curves and circles in architecture or design. Elsewhere, children will be able to hop on a square-wheeled tricycle that travels on a custom-made roadway of U-shaped beams and discover that it moves as smoothly as one with round wheels. “It shows that there is a road for every wheel and that math can be surprising and fun,” Whitney says. Also present will be Rubik’s Cube, the iconic mind-bending puzzle from the 1980s,

which illustrates a number of mathematics principles, Whitney says.

Some donors he approached early on responded to his pitch with a bewildered stare or a frown. “We’d tell people we’re going to start a museum,” Whitney recalls, “and the reaction was, ‘Oh, wow, that’s interesting, but what are you going to have in it? Some old calculators?’”

Whitney won over many donors after putting together Math Midway, a



An artist’s rendering of the museum’s lobby, above, and Whitney with a hyper-hyperboloid, left

traveling version of the museum, which debuted in 2009 at New York’s World Science Festival Street Fair, an annual summer festival of games and exhibits. R.G. Niederhoffer Capital Management founder Roy Niederhoffer, Two Sigma Investments LLC, and New York-based hedge fund D.E. Shaw & Co. are among the museum’s contributors. Whitney declined to say how much of his own money he put into the project.

Once the museum opens, Whitney hopes to encourage more young people across the U.S. to pursue careers that use math skills—jobs that make up an increasing proportion of the total. “People don’t see math as something exciting, as something they should go into as part of their careers,” Whitney says. “We need that.”

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