

Rutgers professor wins coveted science, engineering fellowship

Emil Yuzbashyan
36, Plainsboro

Accomplishment

Rutgers physicist Emil Yuzbashyan was recently honored with a Packard Foundation Fellowship for Science and Engineering, which provides \$625,000 in research funding for five years. This is the first time the Packard Foundation has awarded the coveted fellowship to a Rutgers University professor.

A love of science

Yuzbashyan studies properties of matter at temperatures close to absolute zero — the point where all motion ceases. Understanding how particles interact under these conditions can help promote powerful new technologies such as quantum devices and superconductivity.

Yuzbashyan also worked on a new theory related to the concept of superfluidity, or how a liquid cooled to near absolute zero can flow in a closed loop without any outside sources of energy sustaining that motion.

For Yuzbashyan, his pursuit of scientific truths is a source of happiness and fulfillment.

"There is a certain kind of pleasure you get when you understand something," said Yuzbashyan. "You go into something, then you work on it, work on it, then suddenly you realize how it all works."

An immigrant's journey

Yuzbashyan grew up in Armenia and earned a master of science degree from the Moscow Institute of Physics and Technology in 1995. He later worked at Russia's Joint Institute for Nuclear Research.

For Yuzbashyan, though, there came a point where he had to move to America in order to continue his work.

"U.S. is the best country to do science," said Yuzbashyan. "If you want to do real physics, this is the place to be."

Yuzbashyan was a nomadic professor jumping from place to place, first teaching at the University of Chicago, then Princeton University. He finally settled at Rutgers University.

Yuzbashyan said he didn't have too much of a cultural shock, other than observing America's obsession with drinking lots of Coca-Cola.

Yuzbashyan's wife, Natalia, arrived in the

United States with Yuzbashyan. Also a science professor, she college-hopped from Princeton to Boston and now California. "One thing that was a cultural shock — long-distance relationships," said Yuzbashyan. "Russians and Armenians don't have many long-distance relationships."

Hobbies

Yuzbashyan enjoys reading, especially about history. He is most interested in learning about "extreme periods" like the French Revolution. He also plays chess.

Favorite scientists

Yuzbashyan said he most admires Albert Einstein. "It's amazing the level of insight he had."

Yuzbashyan said the greatest living American scientist is Paul Anderson from Princeton University.

Family

Wife, Natalia, 36.

— Christopher Dela Cruz

