A handful of young Massachusetts professors received the federal government's highest honor for science and engineering educators.

Last month, several federal agencies, including the National Institutes of Health (NIH), the U.S. Department of Defense and the National Science Foundation (NSF), announced the names of five regional professors to receive the Presidential Early Career Award for Scientists and Engineers. All of the New England winners teach at Massachusetts schools.

Among those honored was Marina Umaschi Bers, a professor at Tufts University. Bers developed a software program for young organ transplant patients at Children's Hospital Boston. Bers, 36, describes the technology as a virtual city where children can create their own worlds equipped with restaurants that serve transplant-friendly meals and community centers filled with avatars (picture representation of a person) representing other transplant patients.

In 1994, Bers traveled from her home nation of Argentina to study at Boston University, where she earned a master's degree in educational technology. She earned a master's and a doctorate in media arts and sciences from MIT.

She joined Tufts in 2001 as an assistant professor in the child development department and became a U.S. citizen that same year. Prior to receiving the honor, Bers received a five-year, $500,000 grant from the NSF.

Jennifer Eve Hoffman, an assistant professor at Harvard University who was honored by the Department of Defense, earned a master's degree and a doctoral degree in physics from the University of California Berkeley. She earned a bachelor's degree in physics from Harvard University. She worked under two research fellowships and was a National Merit Scholar.

Walter T. Schaffer, a senior scientific adviser for extramural research at NIH, said the winners are already outstanding scholars in their fields. The awards were established in 1996.

"These awards are the highest honor the government gives to young scientists and engineers," said Schaffer.