Increasingly, scientists are moving away from basic research to focus on translational research, which transitions knowledge directly into clinical applications. But Jeff Tasker, professor of cell and molecular biology, has spent the last 24 years at Tulane University devoted to basic research, proving the importance of the dedicated pursuit of pure knowledge.

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Nick Altiero, right, dean of the School of Science and Engineering, presents Jeff Tasker with the school’s Outstanding Faculty Researcher award on April 9. (Photo by Jamie Thorpe)

“The basic research of yesterday is what supplies the basis for the applied research of today,” says Tasker, who holds the Catherine and Hunter Pierson Chair in Neuroscience. “More and more, research is moving to translation and away from the fundamental quest for knowledge.”

As a neuroscientist, Tasker has been involved in several studies looking at the brain’s control of regulation and balance in different functions throughout the body.

Most recently, he received a grant to study how stress hormones affect brain circuits involved in the formation of fear memories, with implications in the development of post-traumatic stress disorder (PTSD). Tasker will be delving into the part of the brain that is responsible for fear memory and emotion, the amygdala.

“We want to look at why (with PTSD) you can’t get past those memories,” says Tasker. “Why are you unable to extinguish those memories?”

For his work, the School of Science and Engineering honored Tasker as the ninth annual Outstanding Faculty Researcher on April 9. The school’s Outstanding Faculty Researcher is chosen for elevating both the student experience and university status.

“All success that I have is because of my amazing team of (students and postdoctoral) researchers,” says Tasker.

He hopes that future researchers will continue to see the value in basic science. Tasker works every day to try to contribute to the development of a top neuroscience program at Tulane, one that is respected nationally and internationally.