



GENETICS PROFESSOR WINS PRESTIGIOUS AWARD

The North Carolina Award is the highest civilian award in the state

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Trudy Mackay, professor of genetics, was recently announced as one of the six North Carolinians to receive this year's North Carolina Award.

The North Carolina Award is the highest honor that the state bestows and has been awarded since 1961 to individuals who have made significant contributions to the fields of fine arts, literature, public service, and science.

According to the North Carolina Department of Cultural Resources, over 250 people have received the award.

This award puts Mackay in a prestigious group of N.C. State greats, including John Caldwell and William Friday. John Caldwell was the chancellor of the University for over fifteen years. William Friday is an alumnus who served as president of the University of North Carolina system for over thirty years

Additionally, famous North Carolinians such as James Taylor, Maya Angelou, and Billy Graham have won North Carolina Awards.

According to a press release, Mackay's work focuses on the gene sequencing of the *Drosophila melanogaster* – also known as the fruit fly. Her work, which has been made available to other researchers, has become a prominent resource for those studying gene discovery and evolution.

David Threadgill, head of the Department of Genetics, said Mackay's research has very high societal relevance and importance.

"Dr. Mackay's research has important implications for human health and disease," Threadgill said. "The fundamental discoveries on how quantitative genetics alters characteristics like disease susceptibility have direct applications in humans."

Mackay has also done a lot of work in quantitative genetics, according to Threadgill.

"Dr. Mackay is the world's leading quantitative geneticist, which is the study of the genetic factors that contribute to most differences among people in diseases susceptibility," Threadgill said.

Mackay's work in quantitative genetics has contributed to the understanding of numerous health concerns, including diabetes, cancer, glaucoma, alcohol abuse, high blood pressure, and longevity.

David Smith, associate dean and director of the North Carolina Agricultural Research Service, said that Mackay did not receive the award for one specific project or discovery, but as a result of a colorful academic career.

"This award results from a vast body of scientific accomplishments," Smith said. "As a result of her efforts, many different scientists can study the impact of a number of environmental factors across the known genetic range of the fly population and identify the genes responsible for the response."

Smith said that a large value of her research resides in the ability of her work to be disseminated to other scientists.

"It is not just about the research she conducts, but about the total outcome from many scientists based on the knowledge gained from her work," Smith said.

Mackay has received a number of other prestigious awards and recognitions, including the William Neal Reynolds professorship, election to the National Academy of Science (USA) and the Royal Society (United Kingdom), and the O. Max Gardner Award from the University of North Carolina system.

For Smith, the North Carolina award has a special, meaningful value and should serve as inspiration to others.

"The North Carolina Award is special because it shows that her work is appreciated by our state," Smith said. "We should strive to conduct research because of the positive outcome it has on the world around us."

Johnny Wynne, dean of the College of Agriculture and Life Sciences, said that this award is a testament to the quality of work being done at the University.

"[Mackay's] selection helps make the case that N.C. State University has world-class faculty who are making significant contributions to the state and its citizens," Wynne said.

Threadgill said that he thinks this award helps to further establish N.C. State's genetics program as a national leader.

"The award confirms the stature of discoveries and advances in the sciences being made here that will lead to improved health of North Carolinians," Threadgill said. "It documents the importance of N.C. State in driving advances in the field of genetics."

Mackay is the third geneticist to win the North Carolina Award, according to Threadgill. Previous awardees include Dr. Stanley Stephens (1968) and Dr. Clark Cockerham (1976).

The award will be given at 8:00 PM, November 10, at the North Carolina Museum of History.