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## Famed oceanographer recalls decades of discoveries

By MICHAEL J. COLLINS michael.collins@bgdailynews.com Oct 12, 2023



Oceanographer and marine geologist Robert Ballard sits for a questionand-answer session in Western Kentucky University's Van Meter Auditorium prior to his keynote address on Tuesday.

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Robert Ballard isn't typically far from the ocean but took time Tuesday to address a packed auditorium at Western Kentucky University. Ballard retold moments from his career that have caused scientists to literally throw out their old textbooks – from discovering the RMS Titanic wreckage to finding underwater life that defied what was thought to be possible.

Ballard told the Daily News beforehand he hoped to convince students and the public "to follow their passions" in WKU's first Presidential Speaker Series event.

"I've always felt that failure is the greatest teacher you're ever going to meet," Ballard said. "And when it knocks you down, it's your passion that gets you back up."

Ballard, who has dyslexia and ADHD, said people like him face numerous challenges in school. He said his work both exploring and educating young people serves as a reminder not to leave struggling kids behind.

"It's one of the things I want to champion, to let kids know that you can overcome these difficulties – turn them to your advantage," Ballard said.

Sally Tooley, a literacy professor at WKU, was once a kid eagerly listening to Ballard's lessons. Tooley participated in the Jason Project in seventh grade, a program led by Ballard's team for K-12 students across the nation.

"We were able to see live footage from the ocean floor through the Jason Project, which was unheard of at that time," Tooley recalled. "It was amazing. He's just the coolest. He's a rock star." She added Ballard excels at taking massive discoveries and breaking them down so that even young kids can understand their importance. Even today, his ability to educate others is an inspiration for her.

While Ballard is best known for discovering the RMS Titanic, he also found the German battleship Bismarck, the aircraft carrier USS Yorktown and the wreck of John F. Kennedy's PT-109.

Ballard also recalled his discovery of the first hydrothermal vents, where lava flows from the seafloor, in the Galapagos in 1977.

There, he found never-before-seen species of fish and clams completely shut off from light in one of the world's most extreme environments.

"Some of them were 13-foot long, bizarre-looking worms living inside tubes, sticking out their lungs and ingesting poisonous hydrogen sulfide gas," Ballard said.

"We saw clams that were a foot across, giant clams, and when we opened them up, they looked like a steak."

The discovery proved the existence of life that does not rely on the sun. Ballard said it means we likely aren't alone beyond Earth, though he doubts extraterrestrial life is as intelligent as some might hope. Ballard continues to oversee work done on the Nautilus research ship, which uses four remotely operated underwater vehicles to explore historic wreckage sites.

WKU's new Presidential Speaker Series aims to complement student learning by inviting influential guests to speak about a variety of industries, from public policy to science to art.

The next guest has not been announced but will likely come to campus during the Spring 2024 semester.

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