

**Professor Sara Seager, Leiden Dies Natalis Acceptance Speech
February 8, 2024**

Rector Magnificus, distinguished guests, esteemed colleagues, ladies and gentlemen.

Five billion years ago, a star was born – our Sun – beginning the cosmic journey leading to our Earth and its neighbors. We are all on our own cosmic journey. We are all the stars of our own story.

Mine began with my great grandparents, who bravely left everything behind to venture to the then-called “New World” for a better life. This daring spirit was a beacon for my path. And, thanks to my hard-working ancestors, I could have the luxury of curiosity. As a child, a simple glimpse of the starry sky sparked a passion that outshone the practical path expected of me. I chose to chase the stars.

In graduate school in the mid 1990s, I was looking for a PhD topic, when the first exoplanets—planets orbiting stars other than the Sun, were discovered. I jumped at the chance to research these incredible new worlds. But my work faced skepticism and doubt. Because of the tiny signals—exoplanets are adjacent to their much bigger, brighter, more massive host stars—I was repeatedly told that the field had no future.

I saw not a dead end but a universe of possibilities. A wide-open research field ripe for innovation. I carried the grit of my ancestors, guided by a mentor's advice to pursue solid, detectable ideas.

My point here is to encourage all of us to use our personally honed judgement to take action when the right mix of curiosity and opportunity align. Let us take a moment. What are your “exoplanets”? Your undiscovered ventures?

Today, we stand amidst a continuing revolution in astronomy. We know of thousands of exoplanets, some the right temperature to host life. Our technological prowess now allows us to seek signs of life beyond Earth – not as science fiction, but as a tangible, scientific pursuit.

I am profoundly honored to receive this PhD from Leiden University, a beacon of astronomical discovery and a leader in unraveling the Universe's

mysteries. This honor is a tribute to the tenacity of explorers who dared to envision a world beyond the horizon.

Every society in history appears to have had astronomy as part of its culture. So, the frontier of exploration continues to beckon. As our own individual quests continue, we can imagine a radical future. In exoplanets, interstellar probes may rush by the nearest planetary systems for a close-up view. Or even perhaps hundreds of years from now, our descendants may say good bye to everything they have ever known to leave for a New World, an exoplanet.

In conclusion, from the birth of a single star billions of years ago to our gathering today, we've been part of an ongoing cosmic story. As we stand under the same sky where stars have risen and set for billions of years, let us all commit to continue exploring the unknown.

Thank you again, Leiden University, for this incredible honor, and for your unwavering commitment to the pursuit of knowledge.