

**Dankesrede**

**von**

**Prof. Dr. Jennifer A. Doudna**

**anlässlich der Verleihung**

**des Paul Ehrlich- und Ludwig Darmstaedter- Preises**

**2016**

**in der Paulskirche Frankfurt am Main**

**14. März 2016**

**Es gilt das gesprochene Wort**

It is truly a wonderful honor for me to receive the 2016 Paul Ehrlich and Ludwig Darmstaedter Prize together with my colleague and collaborator Dr. Emmanuelle Charpentier. As a young girl growing up in rural Hawaii, I was inspired by the natural beauty of the environment. My father, noting my interest in mathematics and chemistry, often gave me books to read about science, usually an old paperback from a used bookstore. One of the earliest of these to land on my bed one day was “Dr. Ehrlich’s Magic Bullet”, describing the work of Paul Ehrlich to develop specific drug therapies. I was thrilled by the thought of being able to use chemical knowledge to understand biology, an idea that told hold for me and guided my future studies and, eventually, my decision to study biochemistry and the role of RNA in cells.

Personally, I consider this Award to be a strong endorsement of curiosity-driven, fundamental discovery science (after all, we got where we are because of the awesome power of bacteria!), and I hope that it will help us all emphasize its intrinsic value to society. From what I know about the work of Drs. Ehrlich and Darmstaedter, this is what they valued as well.

There are many people that I am deeply grateful to, and I’d like to especially thank my **mentors** including Jack Szostak, Tom Cech, Sharon Panasenko, Fred Grieman, Tom Steitz, Joan Steitz, Robert Tjian and Michael Botchan for their unwavering support and guidance at key points in my career.

I’d also like to thank my **colleagues** at UC Berkeley and elsewhere who have been constant supporters and just fabulous people to work with, including James Berger, Jamie Cate, Jacob Corn, Barbara Meyer, Eva Nogales, Rachel Haurwitz and Andy May. I am of course also indebted to the many wonderful students and postdocs who have worked with me over the years. In particular I would like to acknowledge Martin Jinek and Krys Chylinski, the two scientists in our labs who were key to the research we did to develop the CRISPR-Cas genome engineering technology based on our understanding of the molecular mechanism of RNA-guided DNA cutting.

I am most grateful to my supportive **family members** – my husband Jamie Cate, a remarkable scientist and professor at UC Berkeley as well as a fabulous partner and father to our son Andrew. Jamie, I thank you in particular for countless discussions about experiments and data that have inspired me and continue to motivate me in the lab and beyond. I also thank my sisters Ellen and Sarah Doudna and my parents for their support, and for all the adventures we had exploring volcanoes and beaches as a family in Hawaii in the 1970s.

Thanks to all of you for being here and supporting science and the technologies that come from it, for the improvement of human health and the world we live in.