

Speech by
Professor Howard Duan-Hao Chang

Good evening your Majesty, Members of the King Faisal Foundation, and Honored Guests,

I am delighted and very honored to receive the 2024 King Faisal Prize in Science. I am grateful and humbled by the great recognition bestowed on me by the King Faisal Foundation.

The promise of genomics is to understand, in a comprehensive level, the molecular scripts of life. Our research asked a basic question: how do cells decide when and where to switch different genes on? How do these decisions get passed on over time? Our studies led us to a new class of RNAs, called long noncoding RNAs, that help cells remember their cell fates. Our understanding of the gene switches led to an understanding of how inherited, genetic differences cause disease, especially immune diseases. This understanding also helped to tackle mutations that arise in cancer.

I came to Stanford University in the year 2000, and I am grateful for many talented members of my laboratory and collaborators. A special thanks to my long term collaborator Prof. Will Greenleaf, co-inventor of ATAC-seq. I want to thank my mentors, supporters and especially my family.

My family wife Anne Chang, children, my parents who are with us today—they are my bedrock and make everything I do possible.

Thank you.