Biography



Jennifer A. Doudna, Ph. D.

Howard Hughes Medical Institute Investigator

Li Ka Shing Chancellor's Chair in Biomedical and Health Sciences

Professor - Departments of Molecular & Cell Biology and Chemistry

University of California, - Berkeley

Jennifer A. Doudna, Ph.D., Howard Hughes Medical Institute Investigator, Li Ka Shing Chancellor's Chair in Biomedical and Health Sciences, Professor, Departments of Molecular & Cell Biology and Chemistry at the University of California - Berkeley; Executive Director, Innovative Genomics Institute is being presented with the Gustavus John Esselen Award for Chemistry in the Public Interest for her work on the structural and mechanistic analysis of the CRISPR system.

Dr. Doudna's work on the ground breaking Crispr process utilizes the Cas9 enzyme to splice DNA with pinpoint reliability, allowing precise editing of the genome. This has been recognized universally as a watershed moment in science. Scientists around the world are using the process to explore applications such as crop management, control of insect-borne diseases, cancer treatment, and alleviation of human genetic anomalies.

While these applications are still in development, Dr. Doudna is raising her voice in support of international discussions that recognize the potential for both advancement and abuse of this technology, and the need to develop a consensus on the direction we want to proceed as a society.

The Gustavus John Esselen Award for Chemistry in the Public Interest honors outstanding scientific achievement in scientific and technical work which contributes to the public well-being and has, thereby, communicated the positive values of the chemical profession.

The award is presented annually by the Northeastern Section of the American Chemical Society and has honored such publicly renowned chemists as F. Sherwood Rowland and Mario J. Molina (effect of chlorofluorocarbons on the ozone layer), Carl Djerassi (birthcontrol drugs), and Kary Mullis (polymerase chain reaction).

The Esselen Award is given to honor the memory of G. J. Esselen, past chair of the Northeastern Section and founder of Esselen Research Corporation.

In recognition of her contributions, Dr. Doudna will receive the Gustavus John Esselen Award for Chemistry in the Public Interest on Friday, April 27, 2018, in a ceremony at Harvard University's Mallinckrodt Chemistry Laboratories at 8 p.m.

Free and open to the public, Dr. Doudna's award lecture, to follow the presentation, is entitled "Re-writing the Code of Life: The Impacts and Ethics of Genome Editing."