



2024 NATIONAL INVENTORS
HALL OF FAME INDUCTEE

Born: Jan. 21, 1972

Primary Connections:

- Harvard University (2001-present): Currently, David B. Arnold Professor of Science, Department of Chemistry and Chemical Biology, and Department of Physics
- Howard Hughes Medical Institute: Investigator, 2005-present

Education:

- University of Science and Technology of China: B.S., Physics, 1991
- University of California, Berkeley: Ph.D., Physics, 1996

Key Memberships/Awards:

- Dreyfus Prize in the Chemical Sciences, 2023
- Heinrich Wieland Prize, 2022
- J. Allyn Taylor International Prize in Medicine, 2022
- Lurie Prize in Biomedical Sciences, 2021
- Vilcek Prize in Biomedical Science, 2020
- Breakthrough Prize in Life Sciences, 2019
- NAS Award for Scientific Discovery, 2019
- Pearl Meister Greengard Prize, 2019
- Heineken Prize for Biochemistry and Biophysics, 2018
- MacArthur Foundation: Fellow, 2003

10 Things You Need to Know About

Xiaowei Zhuang

Stochastic Optical Reconstruction Microscopy (STORM)

U.S. PATENT NO. 7,776,613

1. Zhuang was born in 1972 in Rugao, Jiangsu, China.
2. Her parents are both professors — her mother in mechanical engineering and her father in fluid dynamics — at the University of Science and Technology of China.
3. Spending much of her time as a child reading historical novels, some particularly advanced for her young age, Zhuang says she strengthened her ability to focus.
4. After receiving her doctorate at the University of California, Berkeley, she completed a Chodorow Postdoctoral Fellowship at Stanford University under the mentorship of Nobel Prize recipient Steven Chu in 2001.
5. In 2009, Nikon Corp. obtained a license from Harvard University for STORM, and it introduced its N-STORM microscope in 2010.
6. Zhuang is the co-founder, and a scientific and technical advisory board member, at Vizgen Inc., a company that commercialized the MERFISH technology. Fellow National Inventors Hall of Fame® Inductee David Walt also is a Vizgen co-founder.
7. She is on the editorial boards of several scientific journals, including *Science* and *Cell*.
8. Zhuang is an elected member of several academies, including the National Academy of Sciences, the National Academy of Medicine, the American Academy of Arts and Sciences, and the National Academy of Inventors.
9. Summarizing the motivation behind her work, she said, “I’m passionate about making scientific discoveries that advance our understanding of living organisms in nature, and hopefully improve human health. Importantly, I love to invent new tools to enable such discoveries.”
10. Zhuang has 14 U.S. patents.