

## Pioneering Scientist David Deamer to receive ABRF Award for Outstanding Contributions to Biomolecular Technologies

November 2024

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The <u>Association of Biomolecular Resource Facilities (ABRF)</u> is pleased to announce the selection of **David Deamer, Ph.D.**, Research Professor of Biomolecular Engineering at the University of California, Santa Cruz as the next recipient of the <u>ABRF Award</u>, which recognizes Outstanding Contributions to Biomolecular Technologies.



Over his scientific career, Deamer has focused on biological and synthetic membranes. In 1989, Deamer proposed that it may be possible to sequence a DNA molecule by passing it through a nanoscopic pore embedded in a lipid bilayer membrane. Deamer, Daniel Branton, (Harvard University), and John Kasianowitz (NIST) demonstrated the feasibility of this concept in 1996. Collaborative work with Mark Akeson at UC Santa Cruz reported proof of principle in 1999 by showing that a nanopore could distinguish between sequences of adenine

and cytosine in RNA molecules. Oxford Nanopore Technology, founded in the UK in 2005, has developed and distributed multiple devices that incorporate nanopore sequencing concepts. Deamer was elected to the National Academy of Inventors in 2023. In the same year, Deamer, Branton, and Akeson were recipients of the Golden Goose Award at a ceremony in Washington DC. This award recognizes research that attracted much skepticism at first but later resulted in significant societal impact.

ABRF Past President and Award Committee Chair Rich Cole, with the New York State Department of Health's Wadsworth Center, described Deamer's impact:

"Core facilities are the backbone of modern research, providing access to cutting-edge technologies and expertise. They accelerate scientific discovery by fostering collaboration, enhancing reproducibility, and maximizing the efficient use of resources. Deamer uses two core facilities to support his research, both related to nanopore sequencing of DNA. One of these is a nanopore sequencing center established by Professor Karen Miga, a member of the Biomolecular Engineering faculty at the University of California, Santa Cruz. The center features a PromethION instrument capable of sequencing a human genome in five hours. The other core facility he uses is the Wasatch Biolab (WBL) in Heber, Utah. WBL also uses a PromethION to provide nanopore sequencing services to the research community.

The **ABRF Award**, the association's highest scientific honor, has been presented to an extraordinary group of researchers and innovators since 1994, including several Nobel Prize recipients.

Dr. Deamer will accept the Award at the <u>ABRF 2025 Annual Meeting</u>, March 23-26, in Las Vegas.

For more information on ABRF, visit <a href="www.abrf.org">www.abrf.org</a>.