PAST KUGGIE VALLEE DISTINGUISHED LECTURERS

2022 Susan Ackerman, PhD

Steven Kuffler Professor in the Section of Neurobiology Vice Dean for Research, and Professor of Cellular and Molecular Medicine University of California San Diego School of Medicine; HHMI Investigator

Delivered at Stanford University

2022 Eva Nogales, PhD

Professor of Molecular and Cell Biology, University of California, Berkeley Senior Faculty Scientist, Lawrence Berkeley National Laboratory; HHMI Investigator

Delivered at Johns Hopkins School of Medicine

2019 Kyoko Nozaki, PhD

Professor in the Graduate School of Engineering University of Tokyo

Delivered at University of Oxford

2018 Geraldine Seydoux, PhD

Huntington Sheldon Professor in Medical Discovery Johns Hopkins University School of Medicine; HHMI Investigator

Delivered at Princeton University

2016 Bonnie Bassler, PhD

Squibb Professor of Molecular Biology Princeton University

Delivered at Harvard Medical School



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2023 KUGGIE VALLEE DISTINGUISHED LECTURE

Yale University



Innovation by Evolution: Bringing New Chemistry to Life

Frances Arnold, PhD

California Institute of Technology

September 14, 2023

KUGGIE VALLEE DISTINGUISHED LECTURES

We are proud to support prominent women in the biomedical sciences. The Kuggie Vallee Distinguished Lecture series honors the Foundation's co-founder by highlighting women who, like Kuggie Vallee, have become leaders in their fields of endeavor. Dr Vallee was Professor of Biology at Lesley College, an all-girls institution at the time, for 27 years. After she

became Emeritus Professor in 1991, she was appointed Lecturer on Biology in the Center for Biochemical and Biophysical Sciences and Medicine at Harvard University where she remained until her retirement in 2002. Kuggie Vallee was particularly interested in helping to further the careers of her female students.

The Kuggie Vallee Distinguished Lecturer is invited to give a keynote lecture about her work and to meet with host institute faculty to talk informally about her personal journey pursuing a career in science, and to discuss some of the contemporary challenges for women building scientific careers in different parts of the world. ▼

ABOUT THE VALLEE FOUNDATION

The Vallee Foundation was established in 1996 by Bert and Kuggie Vallee to foster originality, creativity, and leadership within biomedical scientific research and medical education by promoting dialogue between active and prominent biomedical scientists around the world. In addition to the Vallee Visiting Professors and Vallee Scholars, the Foundation is keen to promote women in science by sponsoring the Kuggie Vallee Distinguished Lectures. The Vallee community of international scientists gathers at biennial Symposia and, in alternate years, Vallee Scholar Meetings, to report on their scientific interests and address current issues in biomedical science. Further details can be found on our website: thevalleefoundation.org



Frances Arnold, PhD
Linus Pauling Professor of Chemical Engineering,
Bioengineering and Biochemistry
California Institute of Technology

Innovation by Evolution: Bringing New Chemistry to Life

Frances Arnold is the Linus Pauling Professor of Chemical Engineering, Bioengineering and Biochemistry at the California Institute of Technology.

In 2018, she received the **Nobel Prize in Chemistry** for pioneering directed evolution methods used to make enzymes for applications in sustainable chemistry across medicine, consumer products, agriculture, fuels, and chemicals.

In 2021, she was appointed **Co-Chair of the Presidential Council of Advisors for Science and Technology** (PCAST) by President Biden. Arnold received the **National Medal of Technology and Innovation** from President Obama.

Frances Arnold has co-founded three companies in sustainable fuels and chemicals and serves as a Director of Alphabet and Illumina. She has been elected to the US National Academies of Science, Medicine, and Engineering, the American Academy of Arts and Sciences, the American Philosophical Society, and the Pontifical Academy of Sciences of the Vatican.

Arnold received her BS in Mechanical and Aerospace Engineering from Princeton University and her PhD in Chemical Engineering from the University of California, Berkeley. ▼