

AMY ELIZABETH HERR, PH.D.

LESTER JOHN & LYNNE DEWAR LLOYD DISTINGUISHED PROFESSOR

UNIVERSITY OF CALIFORNIA, BERKELEY | BIOENGINEERING

Amy E. Herr received a BS degree in Engineering & Applied Science from the California Institute of Technology and MS and PhD degrees in Mechanical Engineering from Stanford University, where she was an NSF Graduate Research Fellow. She is currently the Lester John & Lynne Dewar Lloyd Distinguished Professor of Bioengineering at the University of California, Berkeley and a Chan Zuckerberg Biohub Investigator. Prior to joining UC Berkeley, she was a staff member in the Biosystems Research Group at Sandia National Laboratories (Livermore, CA). Her research interests include bioinstrumentation innovation to advance quantitation in the biosciences & biomedicine, in particular the study and application of electrokinetic phenomena in multi-stage, heterogeneous bioanalytical microsystems. Her pedagogical interests are in bioengineering design and transport.

Professor Herr is an elected Fellow of the American Institute of Medical and Biological Engineering (AIMBE) and an elected member of the National Academy of Inventors (2017). Professor Herr will serve as Co-Chair of the 2020 International Conference on Miniaturized Systems for Chemistry & Life Sciences (microTAS). Previously she Chaired (2009) and Vice-chaired (2007) the Gordon Research Conference (GRC) on the *Physics & Chemistry of Microfluidics*. Professor Herr is an Instructor (2015-2018) and former Co-Director of the Cold Spring Harbor Laboratory's *Single Cell Analysis* summer course (2015, 2016). At UC Berkeley, she serves as Faculty Director of the Bakar Fellows Program (2016-present) and as the Department of Bioengineering's Vice-Chair for Engineering Engagement (2016-present).

She is a Board member of the Chemical & Biological Microsystems Society (CBMS; which oversees the microTAS conferences), an Advisory Board member for the UCSF Rosenman Institute, and on the Advisory Boards of the journals *Lab on a Chip* (Royal Society of Chemistry), *Analytical Chemistry* and *ACS Sensors*. She is a standing member of the NIH *Nanotechnology* Study Section and is one of 16 US faculty appointed to the Defenses Sciences Study Group (DSSG).

She has been recognized as a *Visionary Awardee* by the City of Berkeley (2017; one of three), Chan Zuckerberg Biohub Investigator (2017-2022), 2016 *Mid-Career Achievement Award* from the American Electrophoresis Society (AES), 2015 *Georges Guiochon Faculty Fellow* from HPLC (inaugural), 2012 *Young Innovator Award* from *Analytical Chemistry/CBMS*, 2011 NSF CAREER award, 2010 NIH New Innovator Award, 2010 *Alfred P. Sloan Research Fellowship in chemistry*, 2010 *New Investigator Award in Analytical Chemistry* from Eli Lilly & Co., 2009 Defense Advanced Research Projects Agency (DARPA) *Young Faculty Award*, 2009 *Hellman Family Faculty Fund Award* from UC Berkeley, 2008 *Regents' Junior Faculty Fellowship* from the University of California, and holds the Mary Shepard B. Upson Visiting Professorship at Cornell University. Professor Herr has been recognized for teaching and mentoring with the 2012 *Ellen Weaver Award* from the Association for Women in Science (AWIS), the 2012 *Outstanding Instructor Award in Bioengineering* (Bioengineering Honor Society student vote) and a 2007 *Outstanding Mentor Award* from Sandia National Laboratories.

To support the international technical community, she actively serves on the technical program committee of several international conferences, including: International Conference on Miniaturized Systems for Chemistry & Life Sciences (microTAS 2009-2012; 2018-2020); Hilton Head: Solid State Sensors, Actuators & Microsystems (2008, 2010, 2016, 2018); The International Conference on Solid-State Sensors, Actuators, and Microsystems (Transducers 2007, 2009, 2012, 2015); IEEE Sensors (2010); and has been a session organizer for the American Institute of Chemical Engineering (AIChE) and LabAutomation. She has been Guest Editor for special issues of the peer-reviewed journals *Lab on a Chip* (Royal Society of Chemistry) and *JMM* (Institute of Physics).

She is faculty advisor to the UC Berkeley chapter of the Society of Women Engineers (SWE) and the Graduate Women in Engineering (GWE), as well as assisted with establishing the UC Berkeley chapter of the National Science Policy Group (NSPG).