



Lynn Zechiedrich, PhD
Kyle and Josephine Morrow Chair in Molecular
Virology and Microbiology
Fluoroquinolones, Topoisomerases, and Supercoiled DNA

Lynn Zechiedrich, PhD, is the Josephine and Kyle Morrow Chair and Professor of Molecular Virology and Microbiology and is a Professor in the Department of Biochemistry and Molecular Biology and the Department of Pharmacology and Chemical Biology at Baylor College of Medicine (BCM). Dr. Zechiedrich co-directs the Gulf Coast Consortium on Antibiotic Resistance, the Texas Medical Center Training Program in Antimicrobial Resistance, and the Quantitative and Computational Biosciences inter-institutional graduate program at BCM. She was BCM's BRASS Mentor of the Year in 2013. In 2020, she was the recipient of the Barbara and Corbin J. Robertson, Jr. Presidential Award for Excellence in Education. Dr. Zechiedrich studies DNA topoisomerases and the antibiotics that target them. Because these drugs target the ternary complex of supercoiled DNA-topoisomerase-drug, she invented methods to generate and purify experimentally tractable supercoiled circles of DNA to study how topoisomerases recognize DNA supercoiling, how fluoroquinolones inhibit topoisomerases, and to use in screens for new antibiotics. An elected Fellow in the National Academy of Inventors, Dr. Zechiedrich holds multiple patents that are licensed to the company she founded, Twister Biotech, Inc. She was a Burroughs Wellcome Fund New Investigator and was funded by a Human Frontier Science Program Research Grant. She is currently funded by grants from the National Institutes of Health and the National Science Foundation. Committed to an environment of inclusive excellence, Dr. Zechiedrich was a founding Ambassador for Inclusion and Equity at BCM, receiving a Woman of Excellence award in 2017 for this work. She is the principal flutist in the American Prize-winning Texas Medical Center Orchestra.