

BioFrontiers - Biology Seminar

September 25, 2020; 3:00 PM

Zoom Meeting: <https://unt.zoom.us/j/98067606539>

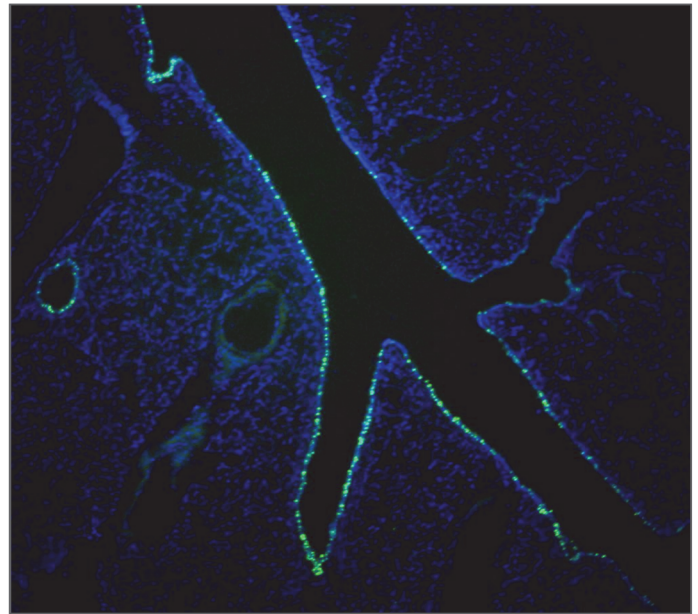


Dr. Paul B. McCray

Professor, Department of Microbiology and Immunology, Carver College of Medicine, University of Iowa

Gene therapy strategies for the treatment of cystic fibrosis lung disease

Dr. McCray is Professor of Pediatrics, Microbiology & Immunology, and Internal Medicine at the University of Iowa. He is the Executive Vice Chair in the Department of Pediatrics, Associate Director of the Center for Gene Therapy of Cystic Fibrosis, and holds the Roy J. Carver Chair in Pulmonary Research. He is a member of the American Society for Clinical Investigation, the American Pediatric Society, the Association of American Physicians, the American Association for the Advancement of Science, and the American Academy of Microbiology. As a pediatric pulmonologist, Dr. McCray has long-standing interests in cystic fibrosis, host-pathogen interactions, airway epithelial biology, pulmonary innate immune responses, and the applications of gene transfer for lung diseases. One focus of his laboratory program has been the application of gene therapy approaches to the treatment and prevention of cystic fibrosis lung disease. Dr. McCray's work is supported by NIH and the Cystic Fibrosis Foundation.



Immunofluorescence microscopy image of the large airways of a mouse showing GFP protein delivery to airway epithelia using amphiphilic peptides

This seminar will provide an overview of gene addition and gene editing approaches for the treatment and prevention of lung disease caused by cystic fibrosis. Recent progress with lentiviral vectors and adenine base editors will be a focus.