



Children's National™

Title of Course: **Pediatric Pulmonology: State-of-the-Art**

Sponsoring Department(s): **Pulmonary & Sleep Medicine, Children's National Hospital**

Washington DC (Children's National Hospital) & Pediatric Pulmonology, Miller School of Medicine, University of Miami

Pathogenic Evolution of Mycobacterium Abscessus

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Day: Friday

Date: Sept. 8th, 2023

Time: 8:00AM-9:00AM

Location: Virtual via ZOOM

[Text code to WEGTOP 703-260-9391]

Learning Objectives:

1. Mycobacterium abscessus is an emerging threat to patients with Cystic Fibrosis (CF) and other chronic inflammatory lung diseases
2. While some *M. abscessus* infections are independently acquired from the environment, many infections result from transmission chains involving person to person spread.
3. Cross infection is likely to be indirect (via fomites and long-lived infectious aerosols)
4. Pathogenic evolution of *M. abscessus* (and other mycobacteria) from an environmental saprophytes into a specialist lung pathogens occurs through discrete (and generalisable) steps involving (i) saltational evolution of virulence in specific environmental clones driven by horizontal gene transfer; (ii) allopatric, within-host adaptation during chronic infection; (iii) constrained evolution while transmission is via environmental intermediaries; and eventually (iv) accelerated pathogenic evolution once direct person-to-person transmission is established.

Accreditation: This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Medical Society of Virginia (MSV) through the joint providership of Inova Office of Continuing Medical Education and Children's National Medical Center. The Inova Office Continuing Medical Education is accredited by the Medical Society of Virginia to provide continuing education for physicians.

Target Audience:

Pediatric Pulmonologists; Advance Practice Practitioners, nurses and respiratory technicians in pulmonary medicine; Intensivists; Emergency Medicine physicians; Allergists; General Pediatricians

Credit Designation: The Inova Office of Continuing Medical Education designates this live educational activity for a maximum of 1.0 AMA PRA Category 1 Credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity. Physicians may claim up to 1.0 credit in Type 1 CME on the Virginia Board of Medicine Continued Competency and Assessment Form required for renewal of an active medical license in Virginia.