



**Chemical Engineering**

## **Fall 2024 Seminars**

**Friday, November 15, 2024**

**3:00pm, 66-110**

### **Addressing Global Challenges at the Interface of Large-scale Optimization, HPC, and Machine Learning**



## **Carl Laird**

**Professor and Interim Department Head,  
Chemical Engineering  
Carnegie Mellon University**

Carl D. Laird is a Professor and Interim Head in the Department of Chemical Engineering and the Director of the Center for Advanced Process Decision Making at Carnegie Mellon University. His research focuses on large-scale nonlinear optimization and discrete optimization with applications in process and energy systems, manufacturing, homeland security, and large-scale infectious disease spread. He is the recipient of several research awards, including the INFORMS Computing Society Prize, CAST Division Outstanding Young Researcher Award, National Science Foundation Faculty Early Development (CAREER) Award, and the prestigious Wilkinson Prize for Numerical Software for his work on IPOPT, a software library for solving nonlinear, nonconvex, large-scale continuous optimization problems.