

# INDUSTRIAL & SYSTEMS ENGINEERING SEMINAR

**Wednesday, March 23**

3:15 PM – Refreshments before the seminar

3:30 PM – Graduate Seminar

**Mechanical Engineering Room 4125 A & B**



## Sequencing and Scheduling Appointments with Potential Call-In Patients

**Professor Larry Robinson**

Associate Professor

Operations Management

Samuel Curtis Johnson Graduate School of Management

Cornell University

We consider a hybrid system appointment scheduling system that accommodates both traditional patients who book well in advance and same-day patients with acute needs who call that morning for an appointment. We use a stochastic linear program to determine the appointment times for any given sequence of patients, for both traditional and potential same-day patients. We use pairwise interchange to find the sequence of patients, and find a simple structure for patient sequencing that performs very well. Our model includes random service times, the possibility of patient no-shows, overtime, and auxiliary non-scheduled physician tasks.

**BIO:** Professor Robinson's research focuses on problems of operating in an uncertain environment; in particular, on developing practical heuristic policies that perform well and can be easily calculated. His research interests range from inventory management to booking limits for discount fare airline passengers, to scheduling doctor's appointments. He has published in a variety of journals, including Operations Research, Management Science, IIE Transactions, and the European Journal of Operational Research. He has been a Mobil Scholar, and has been recognized by Business Week as one of the top teachers in the Johnson School.

**FOR MORE INFORMATION ON PROFESSOR ROBINSON'S RESEARCH, please visit:**  
<http://www.johnson.cornell.edu/Faculty-And-Research/Profile.aspx?id=lwr2>