



**FedEx for lab specimens:
Transport and tracking of lab specimens**

**Customer: Joseph Heim and
UW Laboratory Medicine**

Specimens come to medical lab from clients:

- UW Medical Center, Harborview**
- Medical facilities all over Puget Sound and beyond**

Courier has predetermined route, schedule

Problems

- **Client** cannot track progress (transport, processing, lab tests)
- **Courier** doesn't know if a given stop is necessary
- **Lab** doesn't know how many samples will arrive, or when
 - A special problem for critical/irreplaceable samples
- Current solutions:
 - Inflexible and uncustomizable (closed source)
 - Very expensive

Objectives

- Real-time tracking of lab specimens, couriers
 - Avoid misplaced samples
 - Dynamically re-route couriers
 - Clients, processing center query about samples
 - Hardware: Motorola MC75A PDAs, barcode printers
-
- Real impact on real patients
 - Customer wants to explore designs
 - has programmers for maintenance
 - Can accommodate two teams

