



XII INTERNATIONAL CONFERENCE MES-2018
'Modern Engineering Systems. Architecture of Health'

Shirley Ryan Abilitylab

Cyndi McCullough, MSN
Director, Evidence Based Design



A Living Laboratory



WHEN #1 ISN'T GOOD ENOUGH

Rehabilitation Institute of Chicago



#1 Clinical Care

#1 Rehabilitation Research



IT'S NOT ABOUT THE PATIENT

It's about the patient outcome.

Designed by HDR | Gensler in association with CWA
Graphic Design by EEG Office



PATIENTS



CLINICIANS



RESEARCHERS



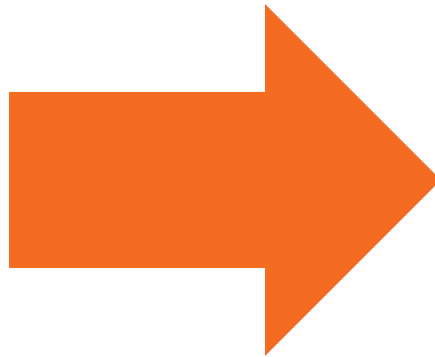
HOW WE SEE
**TRANSLATIONAL
MEDICINE**

TYPICAL
**INDUSTRY
PRACTICE**

NEW CARE
MODEL

17 years

86%



Immerse **scientists** and **engineers** with **doctors**, **therapists**, **nurses** around the **patients**

24/7/365



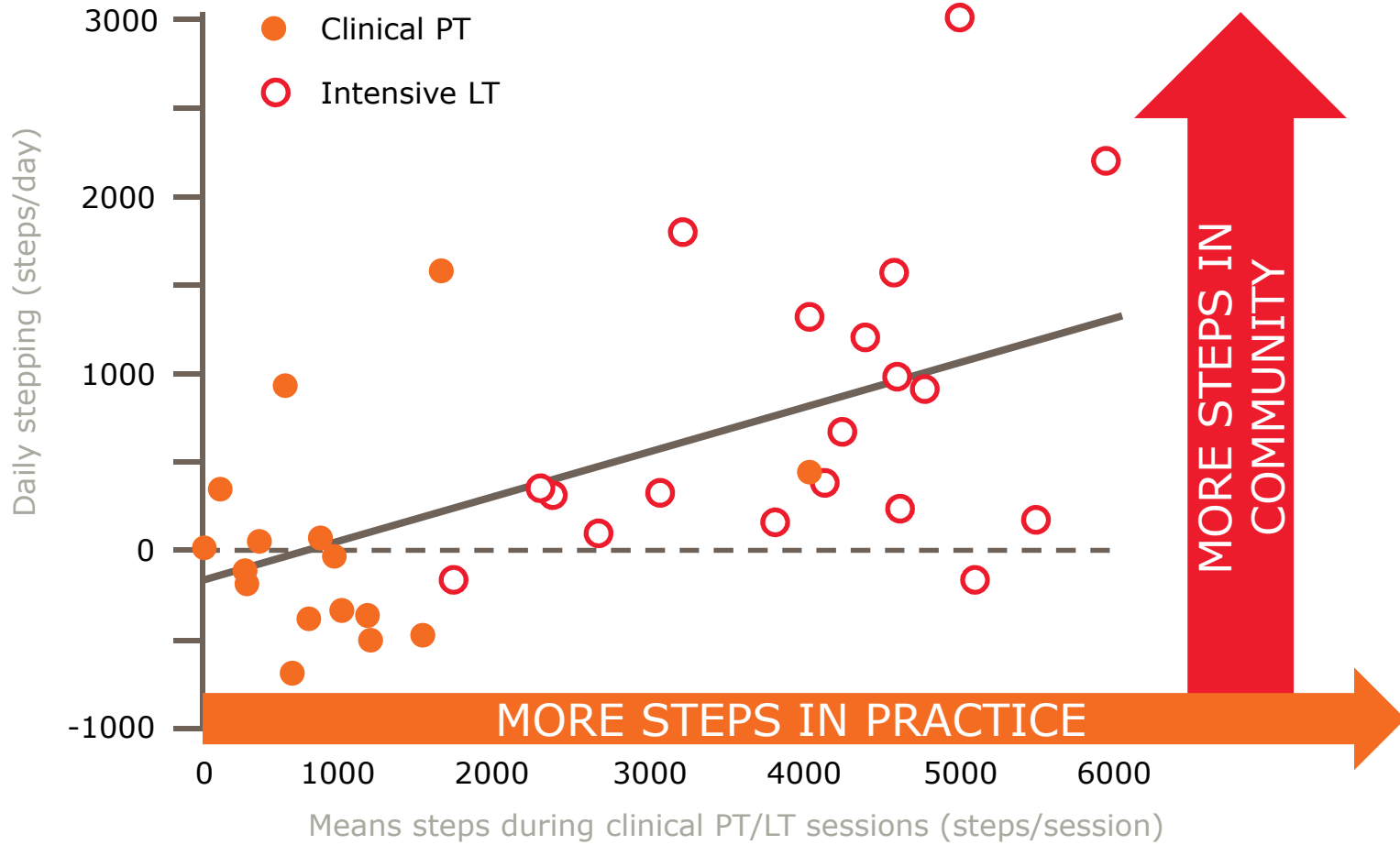
Translation is the process of identifying a new approach or therapy to improve a health need in patients or populations, developing and validating it, then taking it to application in patients and into broader use.

HDR Definition

The Shirley Ryan AbilityLab was designed explicitly as a **catalyst** for Translational Medicine

PROTOTYPING **INNOVATION**

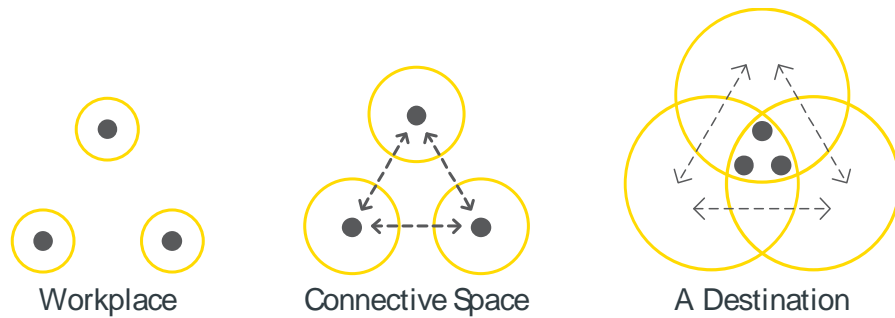




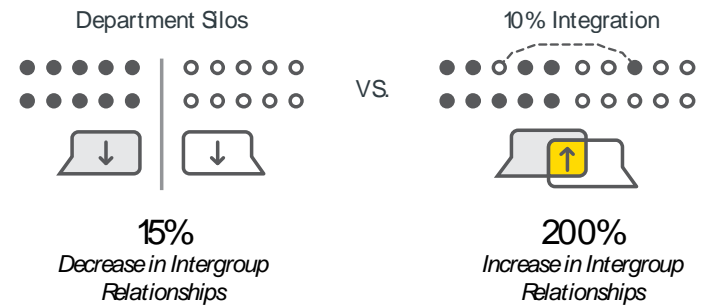
FROM CONCEPT
TO PRACTICE

TRANSLATIONAL HEALTH SCIENCE

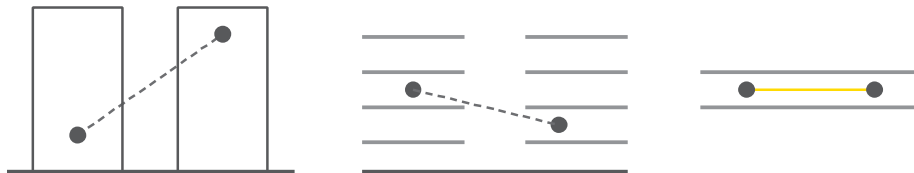
MAKING THE **RIGHT** CONNECTIONS



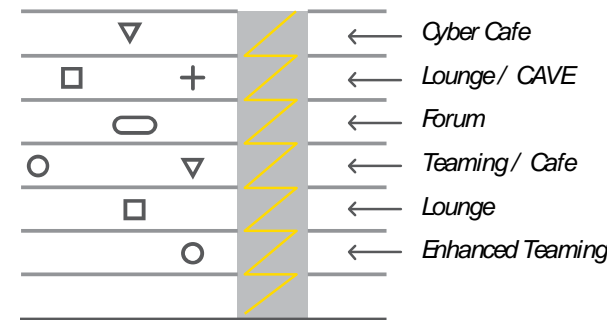
MOVEMENT



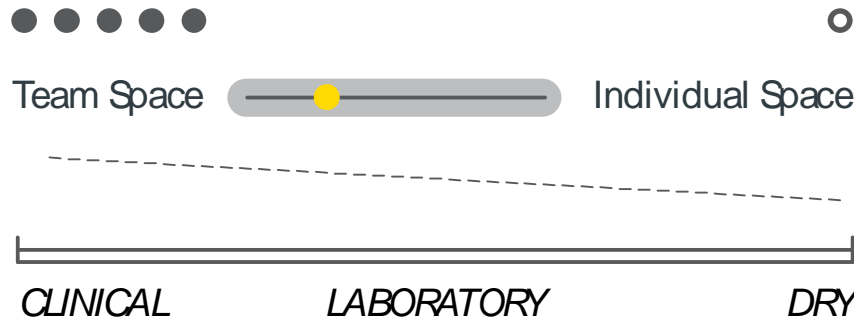
PROXIMITY MATTERS



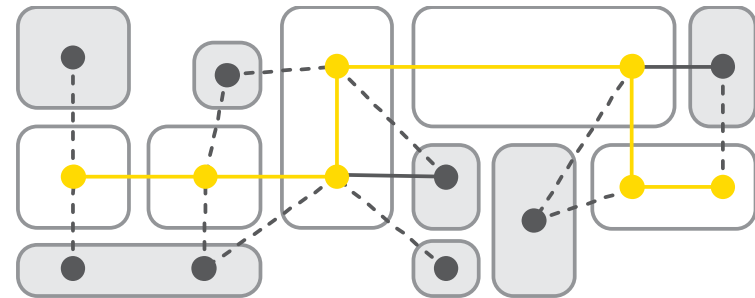
VERTICAL SPINE



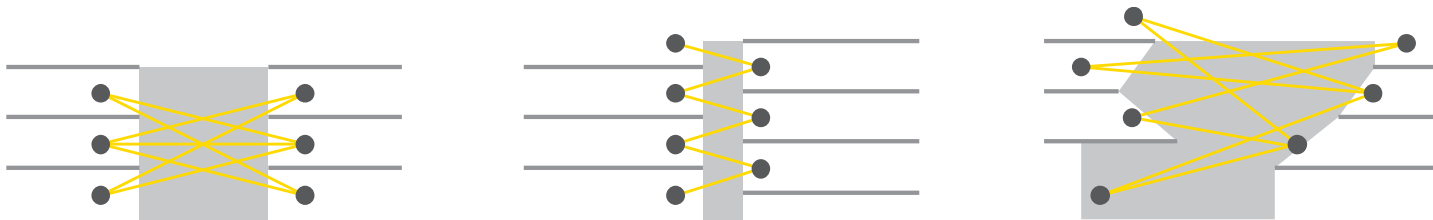
WORKSPACE

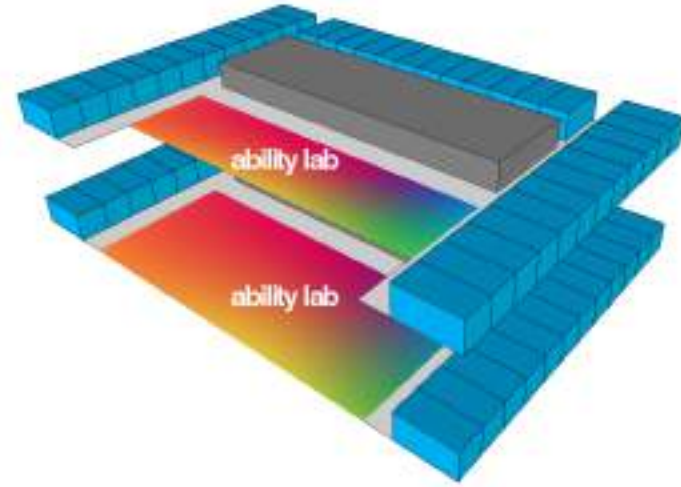


HORIZONTAL INTEGRATION



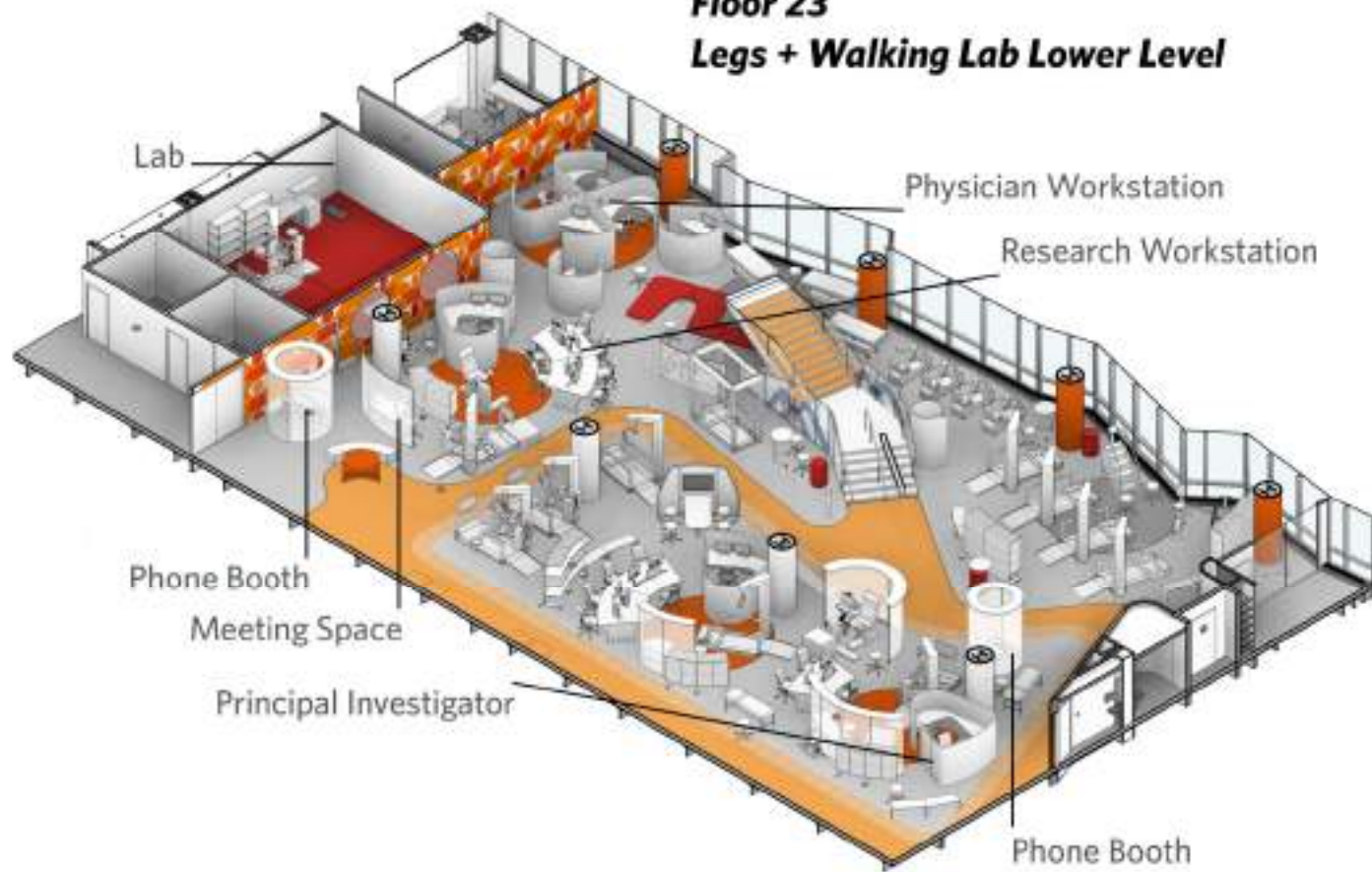
VERTICAL INTEGRATION



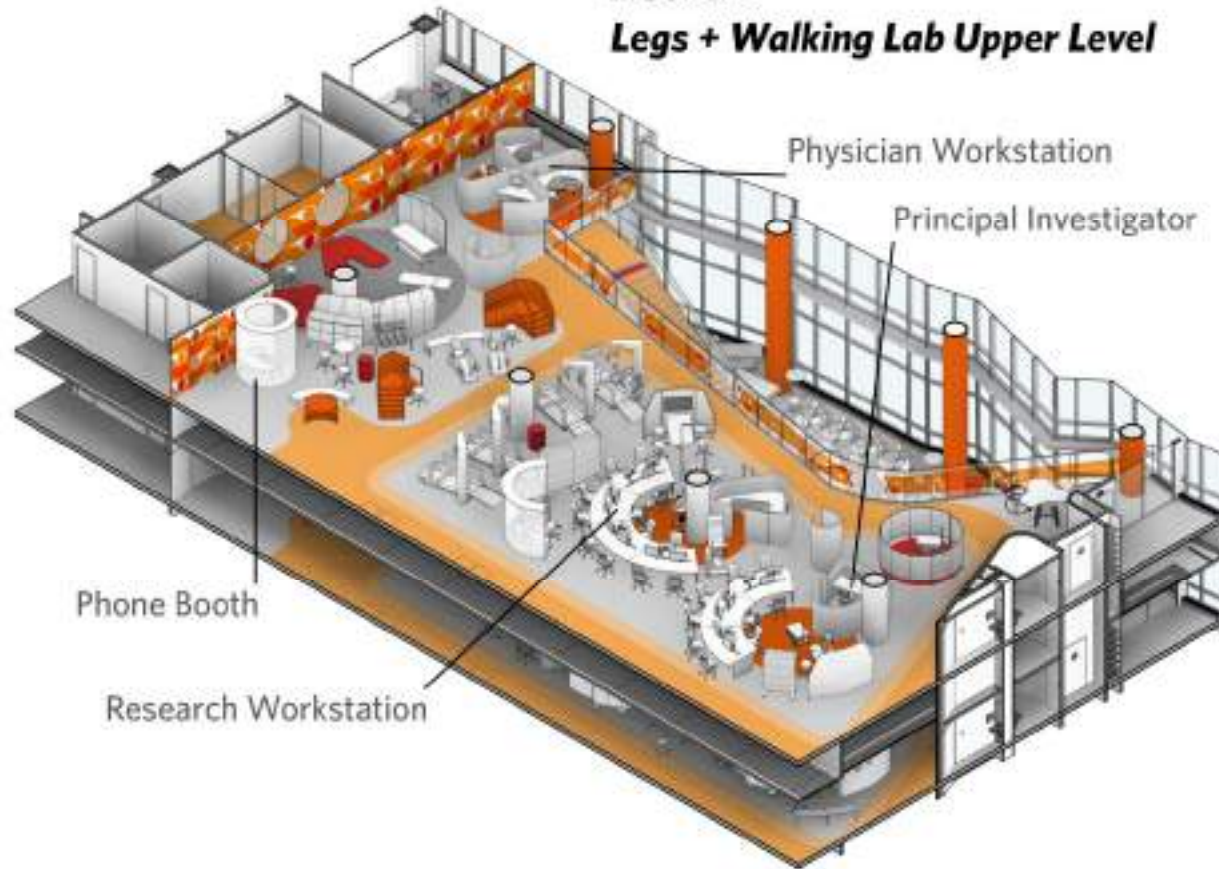


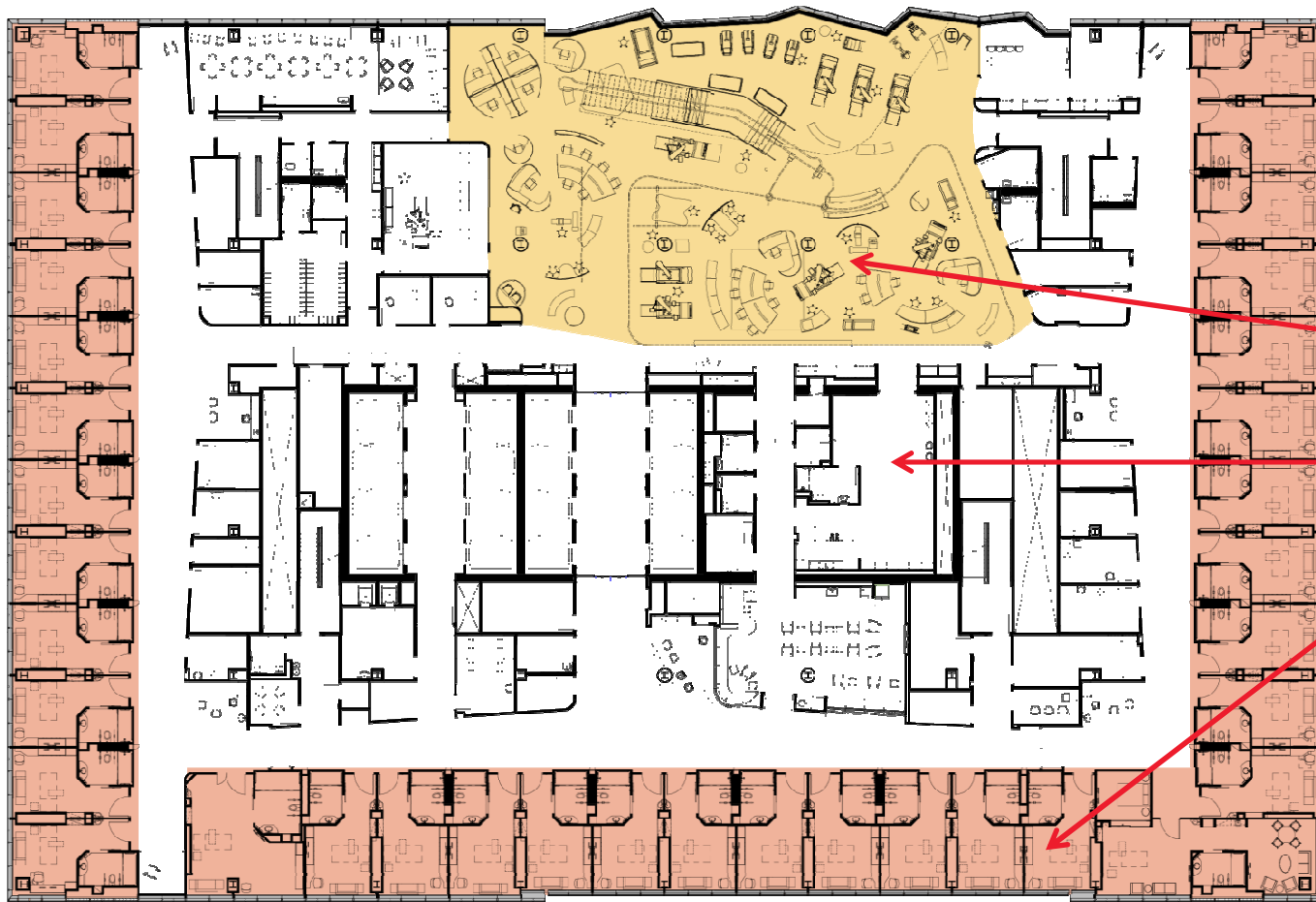
WHAT IS AN **ABILITYLAB?**

Floor 23
Legs + Walking Lab Lower Level



Floor 24
Legs + Walking Lab Upper Level





Level 23
Legs + Walking

AbilityLab

Support Core

**Patient
Rooms**

SCALE
FOR GROWTH

A NEW CARE MODEL

Innovation Centers

Ability Labs

BRAIN

THINK + SPEAK LAB

LEGS + WALKING LAB

SPINAL CORD

ARMS + HANDS LAB

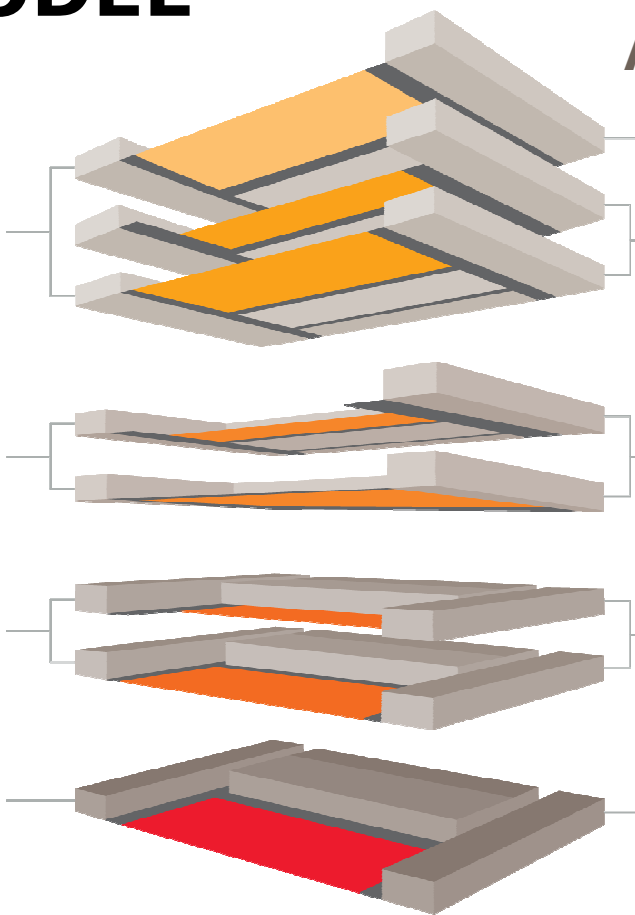
NERVE, MUSCLE & BONE

STRENGTH + ENDURANCE LAB

PEDIATRIC

PEDIATRIC LAB

CANCER
THROUGHOUT



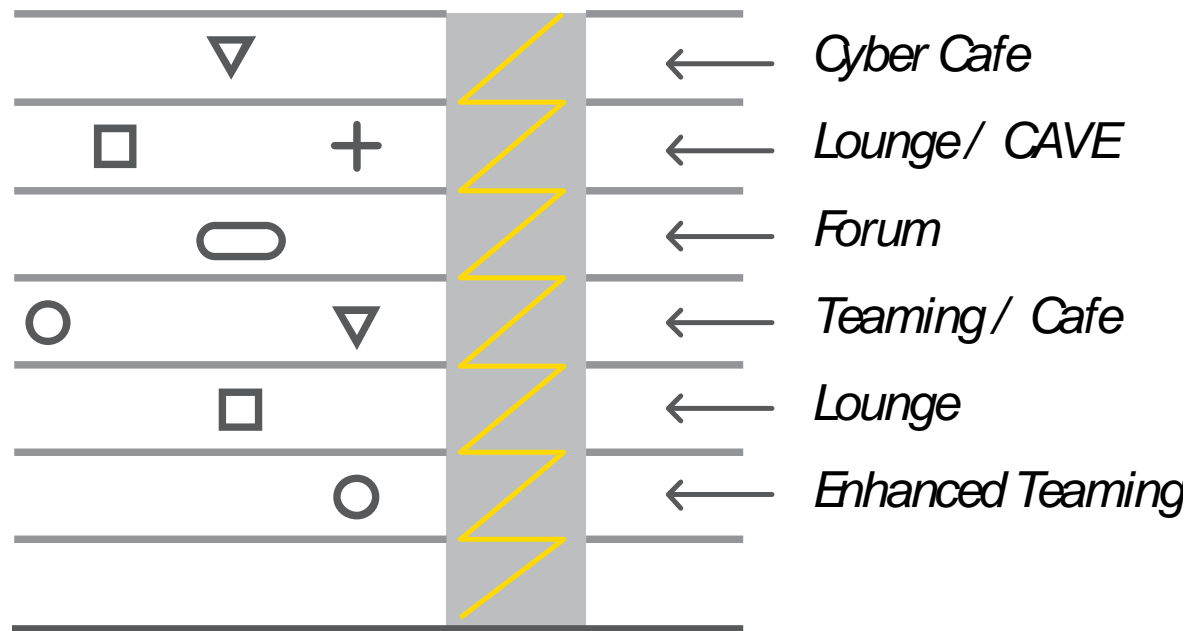
WHAT DOES THIS
LOOK LIKE?



Shirley Ryan
Abilitylab

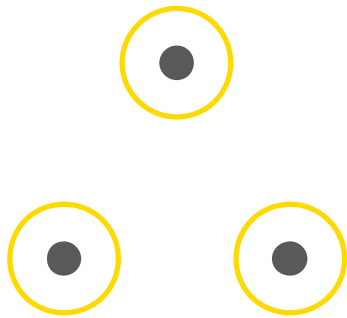


VERTICAL SPINE

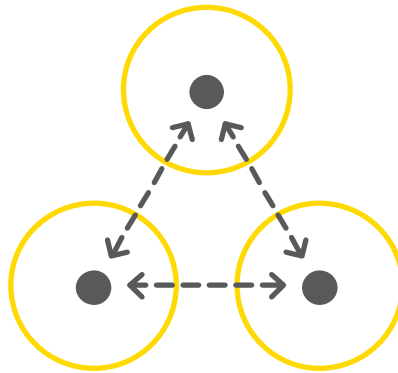




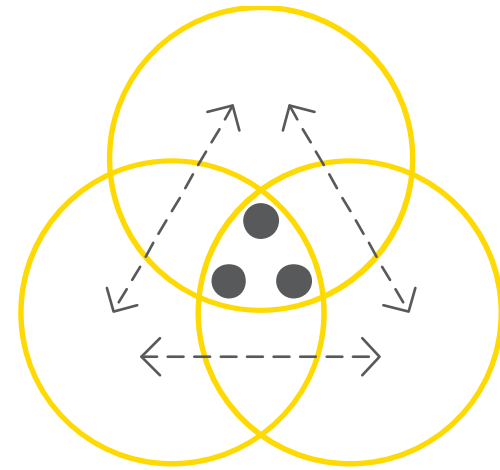
MAKING THE **RIGHT** CONNECTIONS



Workplace



Connective Space



A Destination

Level 10

Sky Lobby & Conference Center

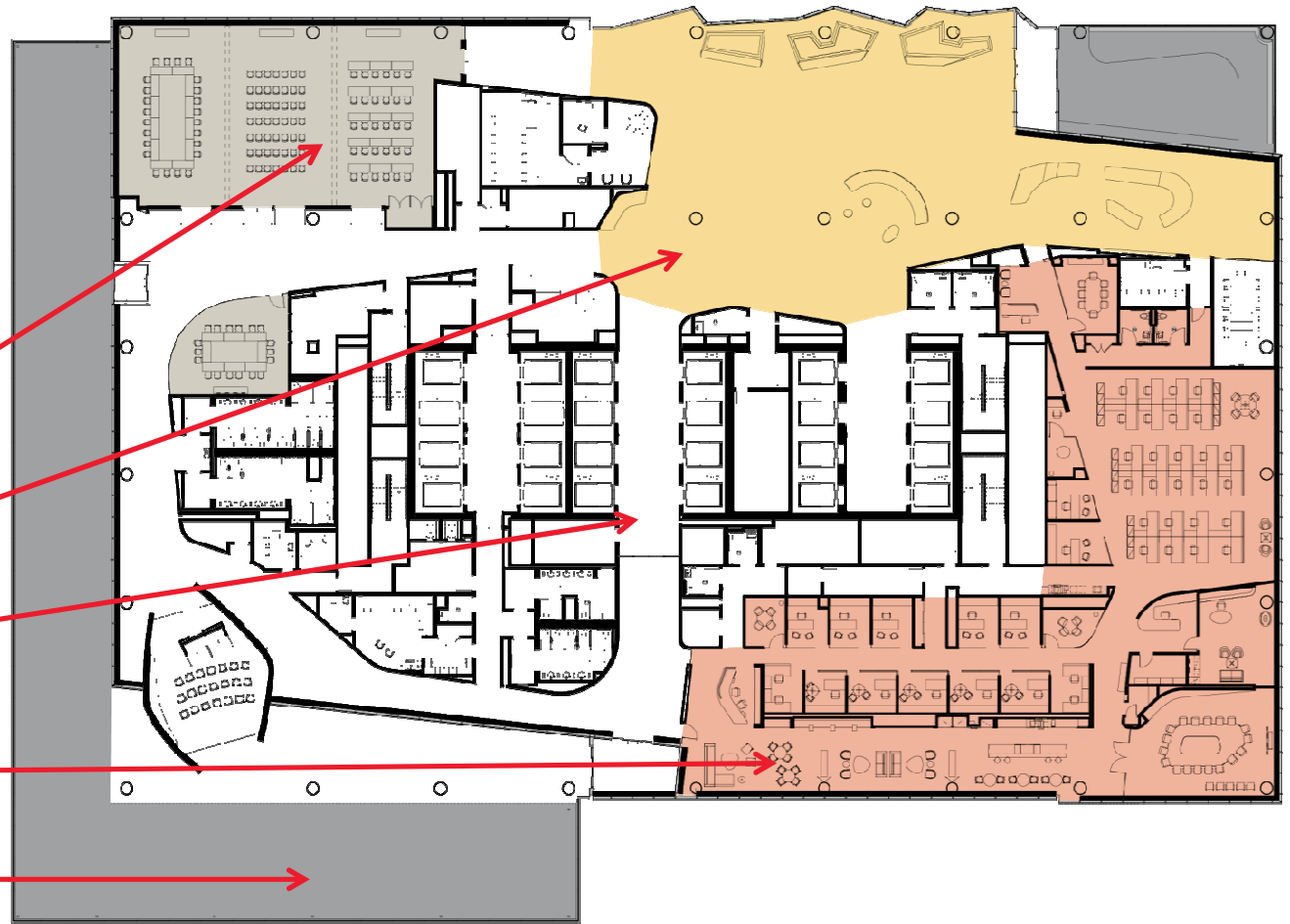
Conference

Sky Lobby

Support Core

Administration

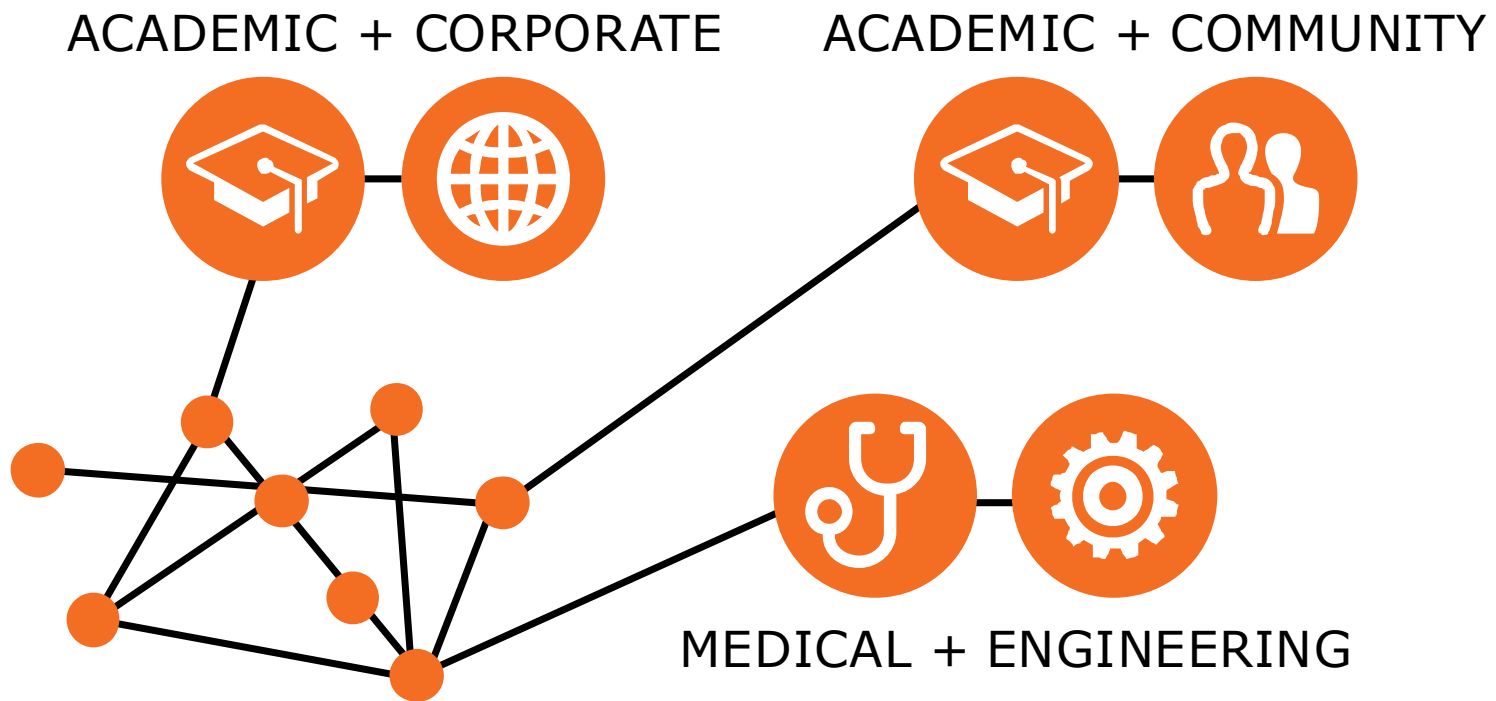
Gardens







DIVERSE NETWORKS



Level 11

Center for Bionic Medicine

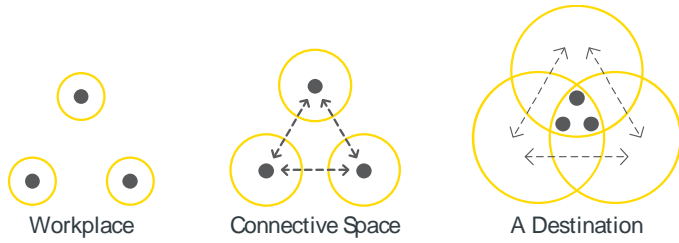
**Prosthetics
+ Orthotics**

Support Core

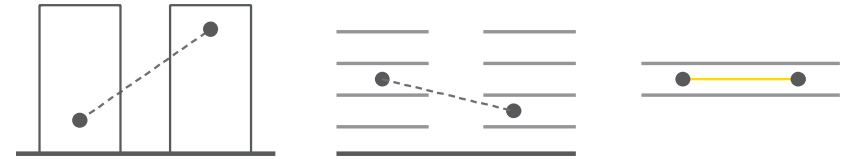
Bionics



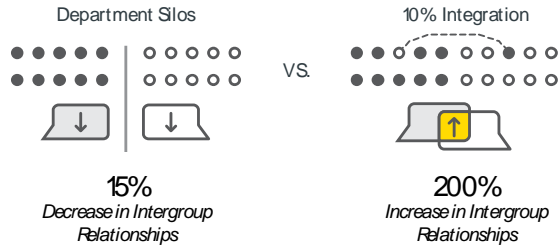
MAKING THE **RIGHT** CONNECTIONS



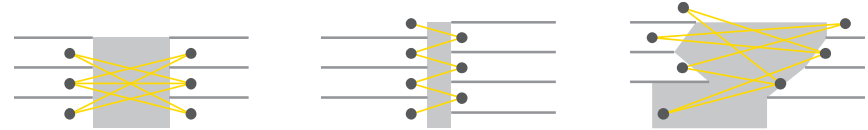
PROXIMITY MATTERS



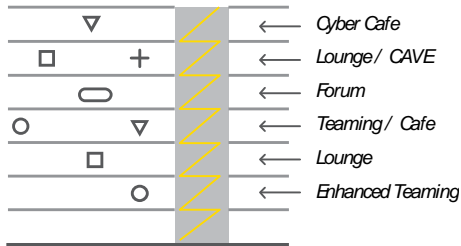
MOVEMENT



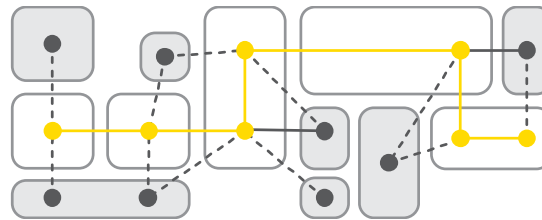
VERTICAL INTEGRATION



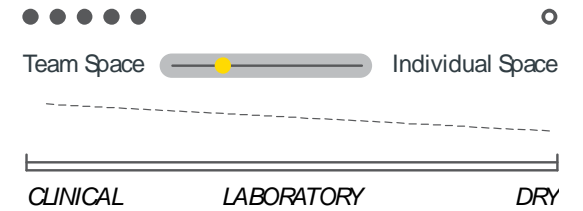
VERTICAL SPINE



HORIZONTAL INTEGRATION



WORKSPACE

















TAKEAWAYS

- Strategy and care model drives design
- Design is informed by research, tested through prototyping
- Take risks, fail fast
- Include the patient – our ultimate customer
- Translational is more than bench to bedside

PAST
TRANSLATIONAL
TO
TRANSFORMATIONAL

