



The development of technology to support positive aging

Geoff Ferris

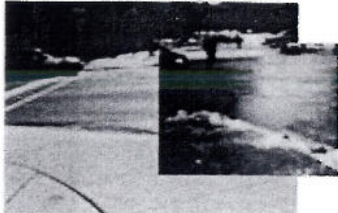
Jake Pauls <sup>UM</sup>

Deaths from fires declining by 2% per year in US

Deaths from stair falls increasing by 6% per year in US

Cost of non-fatal stair falls in US \$50b per year


Curb ramps




What does positive aging mean to me?

- Continuing to live in my own home
- Staying safe and active
- Able to care for my family

Stairlab



Existing Crossings with Curb Cuts




Anthea Tinker <sup>UM</sup>

"Biggest problem older people report at home is going up and down stairs"

Can I stay living in Canada in winter and still get out without falling?

A broken hip is usually a disaster

Barrier Free Design Concept



Can I plan ahead so a move is not necessary?

Could I make a way into the home on the level with access to a bedroom, bathroom and kitchen?


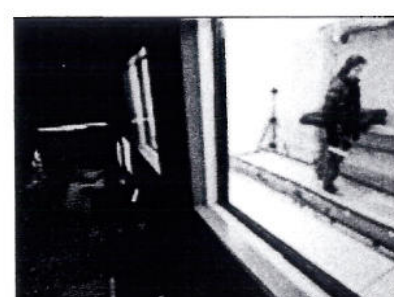
SoleSensor




Stephan Perry

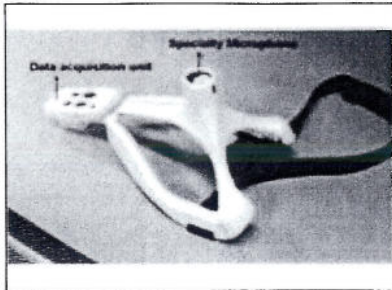
Puddles at Curb Cuts

- Puddles form regardless of property class or traffic
- 44% of all the curb ramps had large puddles
- 31% of these were near 41% of the best 25 ramps in town

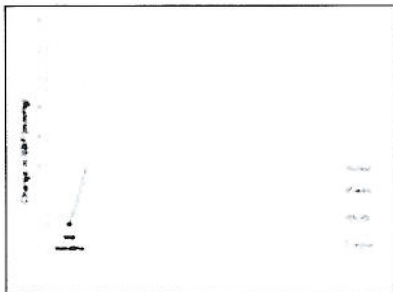
Curb Ramps in Winter



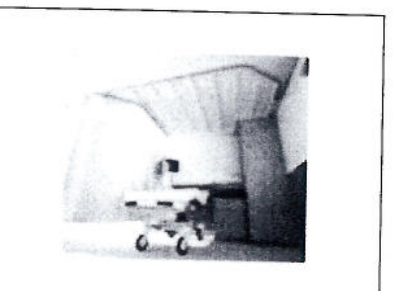
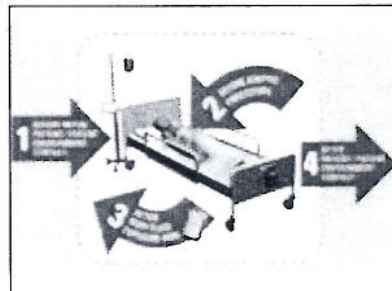
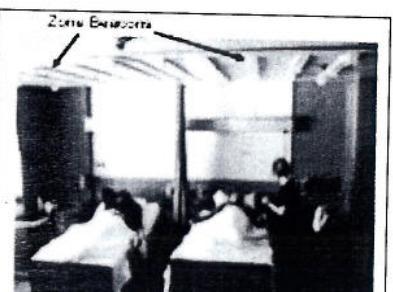
**Hospital Acquired Infections**

• 1 in 10 admissions  
 • 100,000 AIs  
 • 50,000 deaths due to inadequate hand hygiene



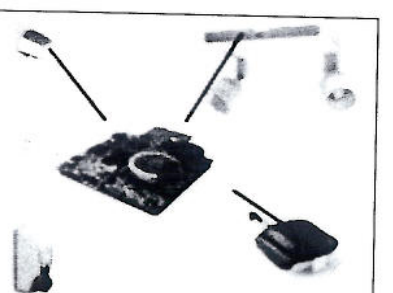
**Current Practice**

• "The 4 Moments"



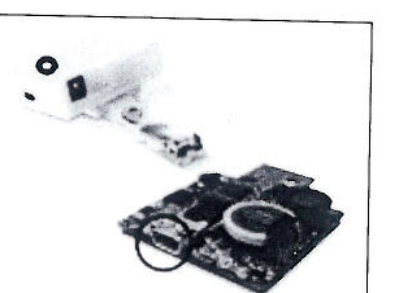
**Research to prevent illness?**

Sleep apnea  
 Hospital acquired infections



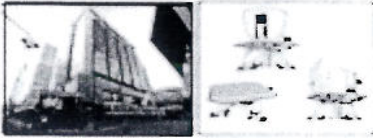
**Sleep Apnea**

- 6.5% adult population of whom 87% undiagnosed (1,250,000 Americans)
- 4X risk of serious ICH (annual stroke \$120,000,000 in US)
- 0.4% GDP
- requires sleep lab stay for diagnosis \$5000 - 20000



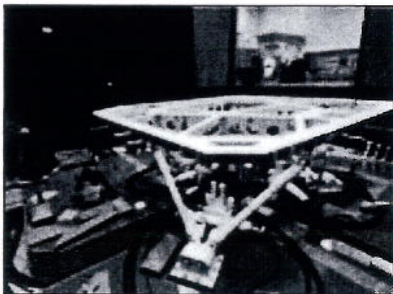
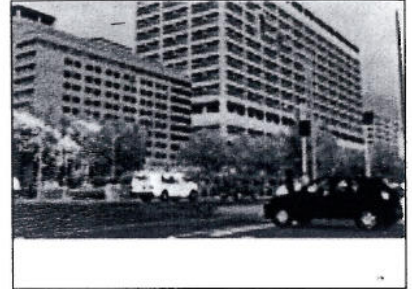
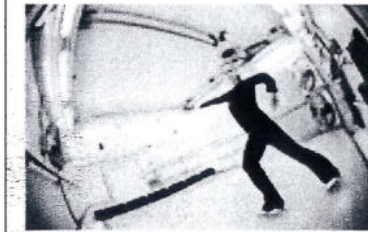
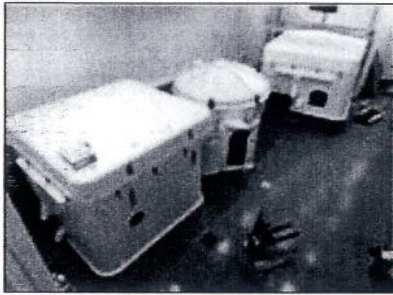
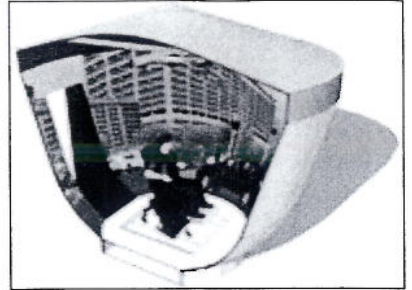


CEAL

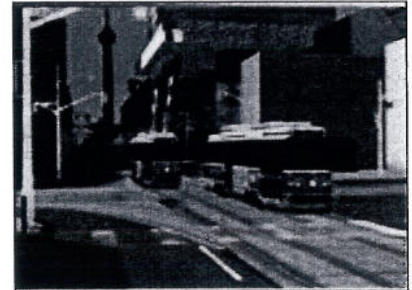


iDAPT

Winterlab



ClimateLab



Visit us & get involved

- [campusjennifer@torontolab.on.ca](mailto:campusjennifer@torontolab.on.ca)
- [www.CLALdapc.com](http://www.CLALdapc.com)

Stairlab

StreetLab

Visit us on Sunday 5 June  
at FICCDAT

- [www.FICCDAT.ca](http://www.FICCDAT.ca)

