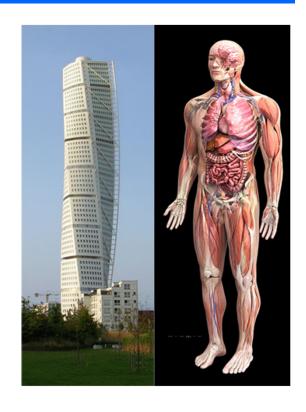
# Indoor Air Quality Building Anatomies & Their Importance

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ESI Mini-Symposium: Environmental Science & Public Health Legislative Assembly Room, UT SAC – 24 October 2014

# Importance of Buildings & IAQ



- 78.7 / 70 / 50 / 26 / 5 (varies by country)
- Higher levels of many toxic chemicals
- Dominates lifetime exposure to toxic chemicals
- Huge impact on fetuses, newborns

"If truckloads of dust with the same concentration of toxic chemicals as is found in most carpets were deposited outside, these locations would be considered hazardous waste dumps"

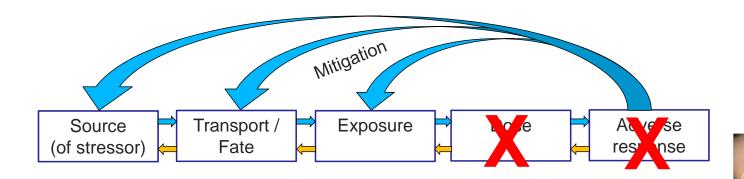
Ott & Roberts, "Everyday Exposure to Toxic Pollutants," Scientific American, 1998

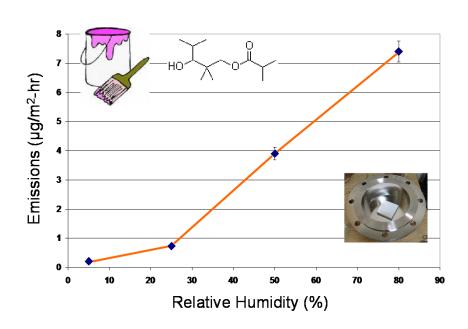
http://vimeo.com/107277872

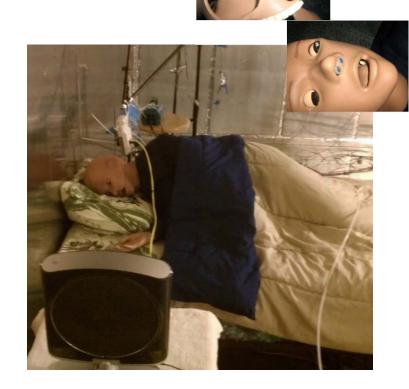
- IAQ affects productivity
- Buildings impact the natural environment

# Research Focus



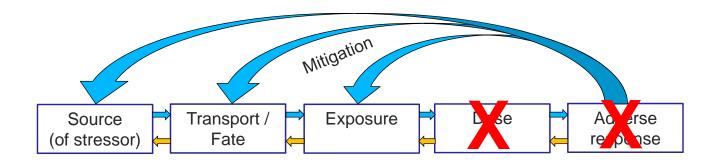


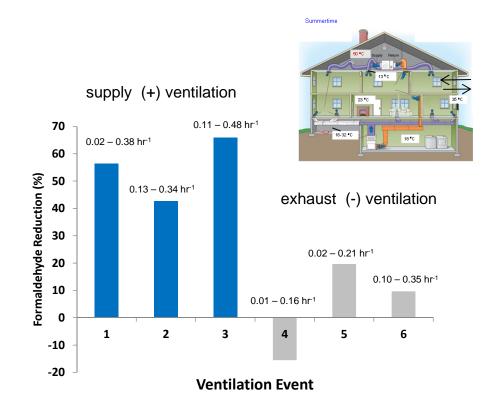


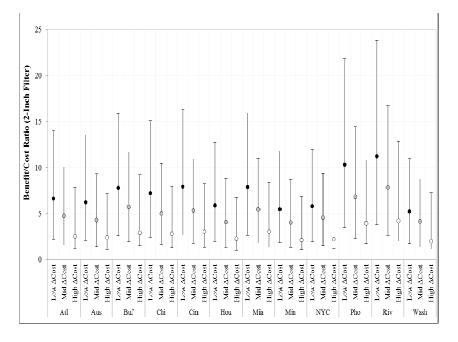


## Research Focus









City-specific benefits of AcC filters for O<sub>3</sub> exposure reduction

### Interdisciplinary Collaboration

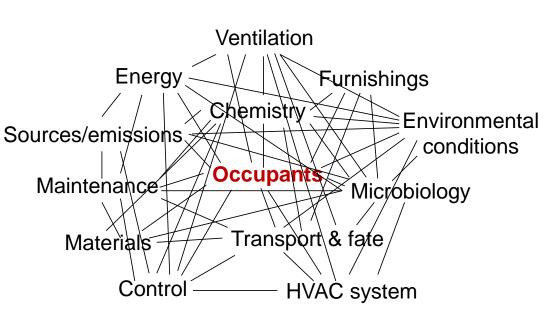


#### Past/Present

- School of Architecture / Community & Regional Planning
- Human ecology (textile and apparel)
- Psychology
- Communication science
- Economics
- Nursing

#### Future (same + )

- Epidemiologists
- Health clinicians
- Toxicologists

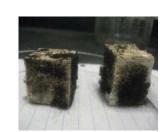


## Challenges → Opportunities → Contributions



Green materials/products & IAQ

Urbanization & IAQ



Emerging pollutants & IAQ



Airborne infectious disease & IAQ



Climate change & IAQ





# Communicating w/ Me



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