

# Getting to Evidence-Based Lighting

Jennifer A. Veitch, Ph.D.

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National Research  
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# Well-Designed and Well-Conducted Research

- Fundamental → applied
- Interdisciplinary:
  - architecture, psychology, physiology, medicine, physics...
- Multi-party:
  - industry, designers, regulators, scientists
- Peer-reviewed
- Replicated

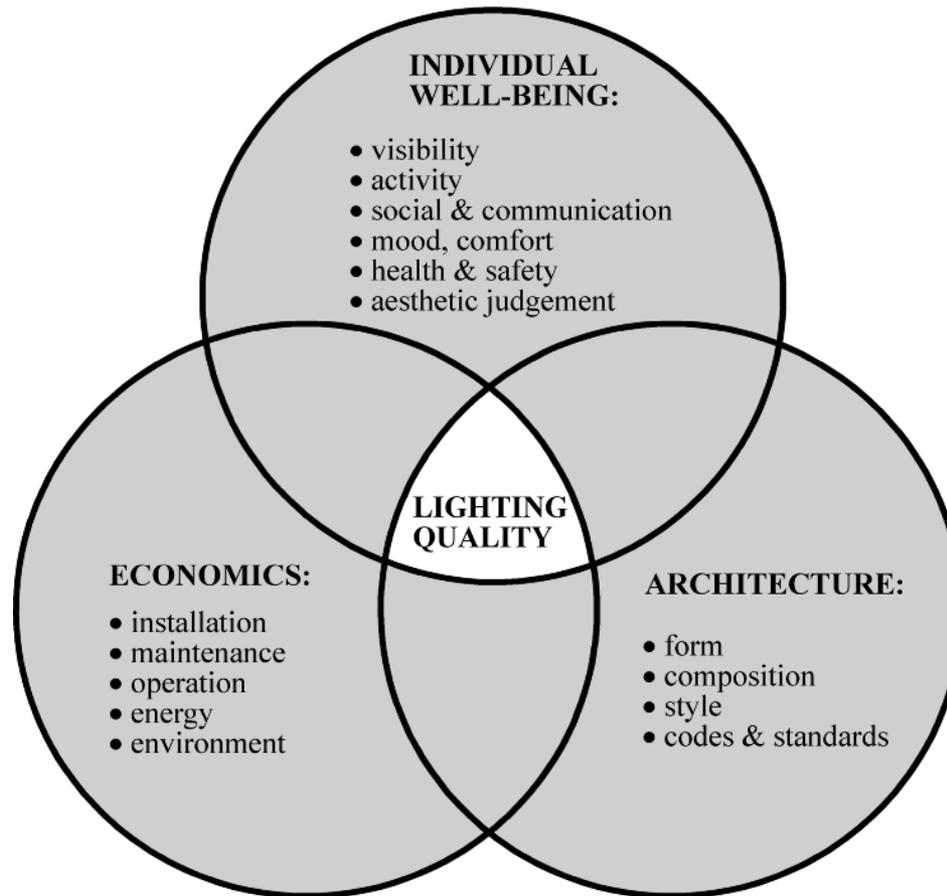
# Rate-Limiting Factors

- Not enough science – not enough scientists study light and lighting
- Knowledge transfer gap from science to practice
  - Misaligned reward structures
  - Skill gap for scientists
- Lighting is ubiquitous, therefore invisible
  - Science funding agencies don't prioritize us
  
- (\$\$\$, of course)

# What can industry do?

- Actively build consensus about fundamentals:
  - Use evidence in your standards and recommendations work
  - Bring together groups of scientists to address important questions to form consensus (\$)
    - e.g., First International Workshop on Circadian and Neurophysiological Photometry, 2013 ([CIE TN 003:2015](#))
  - Support experts to participate in standards/recommendations cttes (\$)
- Actively participate in human factors R&D:
  - Letters of endorsement to support scientists' funding applications (confirming importance of topic)
  - In-kind support (equipment, design, photometric expertise) (\$)
  - Participate in research consortia to develop evidence (\$-\$\$)
  - Sponsor independent research to develop evidence (\$\$-\$\$\$)

# Integrated Lighting



*NRC Lighting Quality model.*

# Thank you

Dr. Jennifer A. Veitch  
Principal Research Officer, Intelligent Building Operations  
Tel: 613-993-9671  
[jennifer.veitch@nrc-cnrc.gc.ca](mailto:jennifer.veitch@nrc-cnrc.gc.ca)  
[www.nrc-cnrc.gc.ca](http://www.nrc-cnrc.gc.ca)