

# McMaster Institute for Healthier Environments

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# Exciting times for Environments & Health Research

- New insights: e.g., exposome, dental lead & Alzheimer's, social, built environments
- Evidence of social/stress mediation of air pollution & asthma relationship
- New E&H initiative at CIHR; Foundation scheme
- ↑ plurality of 'environments' in health research
  - Need new metaphors from 'exposure' to 'affordances'...
- Policy interest in built environments, environmental health equity, interventions

# Why have an institute?

- MIEH established in late 1980s to:
  - Break down disciplinary silos within & outside McMaster
  - Give scholars at McMaster pre-publication access to cutting-edge research
  - Capitalize on societal interest in environmental sustainability
  - Academic knowledge still somewhat sequestered from broader society, public access barriers

# New realities

- 20+ years later, 'why have an institute?' faces new realities
  - Many barriers to interdisciplinary research overcome, some support still needed though
  - Internet, social media, etc. now give ready access to knowledge in a variety of forms
  - Societal concern re: environmental health & sustainability well-established, but needs support
  - Significant pressure to make research relevant to real-world problems, community engagement

# Transforming MIEH

- Change name to **McMaster Institute for Healthier Environments**
  - Explicitly captures plurality of 'environments'
  - Signals a more action-oriented vision
- Environments defined broadly as: healthy places to live, work & play
- Action focus => knowledge mobilization
  - Integrated knowledge mobilization
  - Long-term relationships with municipal, provincial, NGOs and community leaders / groups

# Research and the Policy Process: A Framework for Action

- New insights on how health research can inform policy proposes a simple but helpful model
- According to Fafard (2008) 5-part process
  - Agenda-setting
  - Policy formulation
  - Decision-making
  - Policy implementation
  - Policy evaluation
- With this model, MIHE will be better able to target activities for greatest impact, expand scope

# MIHE Knowledge Mobilization Framework

- MIHE would be guided by a modification of Fafard's model. Types of research MIHE would be:
  - Discovery
  - Agenda-setting
  - Policy formulation
  - Decision-making
  - Policy implementation
  - Policy evaluation
- Role of institute?
  - Help identify opportunities in this continuum
  - Build teams & networks internally
  - Establish and maintain external relationships
  - Raise & maintain profile of MIHE as 'go-to' institute

# Knowledge Mobilization Vehicles

- Hamilton Anchor Institutions Leadership forum
  - ‘cabinet’ of ‘anchor institutions’ for evidence-informed, intersectoral action on complex problems
- McMaster Health Forum
  - Excellent resource for accelerating knowledge to action cycle (evidence-insight-action)
- Ontario Strategic Plan for the Public Health Sector
  - ‘promote healthier environments, natural and built’
  - ‘optimize healthy human development’
- Build on relationship with Hamilton Public Health
  - Vision 2020 to be updated in 2015...Vision 2060?
  - Good opportunities to work with other public health units
- Workshops, public lectures, social media, Ted talks..?



# Education & Training

- MIEH had successful certificate program
  - Eclipsed by proposed MPH in Dept. of CE&B
  - MIHE to work closely with MPH for student opportunities
  - Develop & conduct professional development workshops at practitioner & policy conferences
- MIHE to be a platform for graduate student enrichment in all programs
- Exploring possibility of PhD specialization
- Graduate student conference to profile MIHE?

# Interdisciplinarity

- Research on healthier environments is taking place within many disciplines
- Encouraging involvement from faculties:
  - Governance – advisory committee to have reps
  - Consultations with Associate Deans of Research
  - Support from MIHE for interdisciplinary ‘signature projects’
- Opportunities in Communications, School of Arts, civil engineering, computing science, health science, political science, social work, nursing
  - Also seek stronger connections to Allergen, CLSA, Gilbrea Centre on Aging, Centre for Climate Change; Engineering & Public Policy; UNU-INWEH; new Chair in Water Policy; Offord Centre

# Internationalization

- Bring together theme groups to organized Hooker visiting lectureships, others
  - To raise McMaster profile & give students int'l contact
- Active recruitment of Fulbright Visiting Chair
- Encourage and conduct comparative environments & health research
- Scan internationally for best practices in knowledge mobilization in E&H research
  - e.g., UK highly advanced in evaluation research, implementation research
- Professional development & training at conferences & trade shows

# Goals of the CIHR Environments & Health Signature Initiative

- To leverage and enhance data platforms for etiologic, measurement and intersectoral prevention research that have the greatest relevance to the priority nexus areas
- To advance our understanding of how environment-gene-microbiome interactions affect disease patterns and human health across the life course
- To advance understanding of how to prevent and mitigate environmental threats and promote healthful environments within Canada and globally



# CIHR Signature Initiative Nexus Research Areas

Research will integrate a nexus approach within and across the following priority nexus areas:

- **Agri-food production** (e.g. effects of farming intensification practices and equitable access to a safe and nutritious food supply)
- **Resource development** (e.g. community engagement and mitigation strategies to reduce or prevent exposure to contaminants)
- **Urban form** (e.g. supportive transportation and municipal planning processes that encourage active transportation)

# CIHR Signature Initiative: Intersectoral Prevention Research

- More evidence needed to strengthen systems-oriented intersectoral strategies to effectively prevent and mitigate environmental threats and promote positive healthful environments.
- Intersectoral prevention research studies need to: test system innovations in prevention and mitigation strategies; and examine a range of influences on environmental decisions that affect health.

# Discussion Questions

- What value-added can MIHE provide to you and your research?
  - What specific 'services' should it provide?
- What knowledge mobilization activities are most attractive to get involved with?
- What are the most important KM targets for your research?
- What privileges and responsibilities should come with membership? Tiered members?
- How to get involved in education? Grad students? Undergrads?

# Discussion Questions

- How best to define the scope of your theme area?
- What are the most pressing research & policy questions for your theme area?
- What kinds of expertise exists / is missing to pursue a research agenda in this area?
- What can the institute do to make the whole greater than the sum of the parts?
- What kinds of policy agendas or other opportunities can your theme connect to?