

Health and Behavior Pillar

Members:

Dawnette Ekejiuba

UM Boston

Laura Hayman

UM Boston

Winston Langley

UM Boston

Lori Nickerson

UM Dartmouth

Tony Garro

UM Dartmouth

Ed Beard

UM President's Office

John Cunningham

UM Amherst

Patty Freedson

UM Amherst

Nancy Cohen

UM Amherst

Brendan H. Chisholm

UM Worcester

Milagros Rosal

UM Worcester

Judith Ockene

UM Worcester

David Wegman

UM Lowell

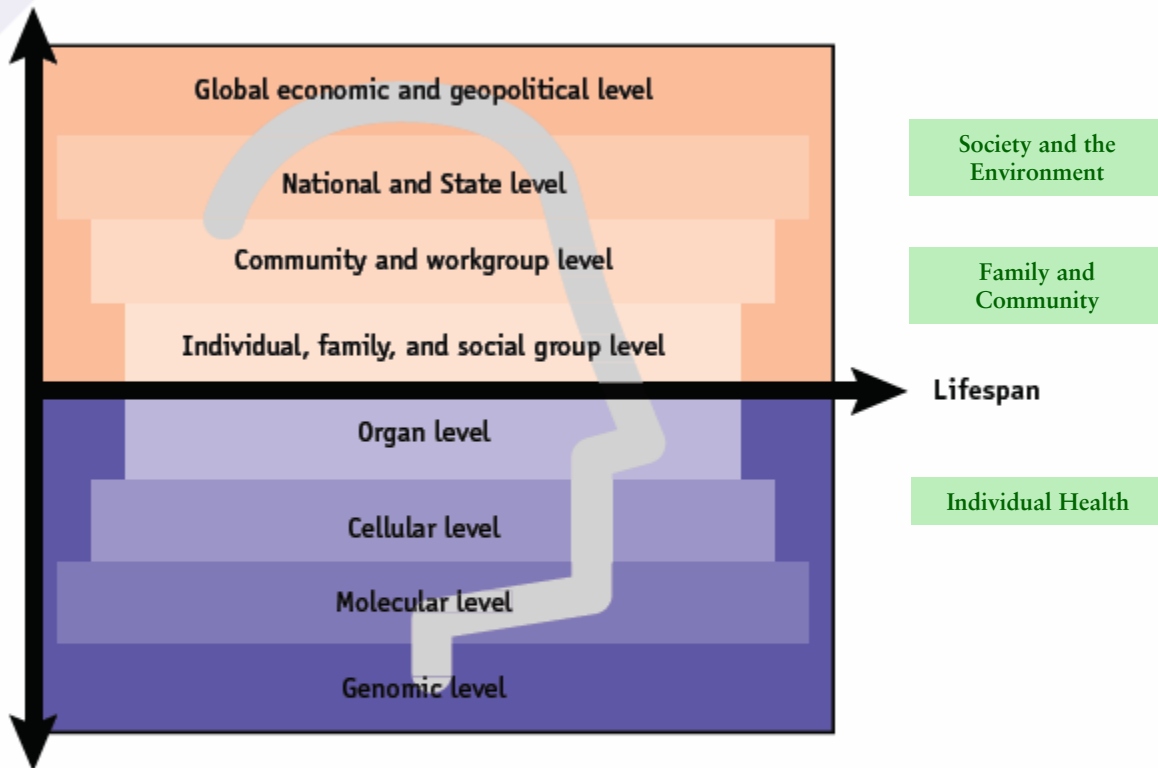
Eugene Rogers

UM Lowell

Health and Behavior Progress to Date

- Two group meetings (1 in-person; 1 phone)
- Established title, conceptual framework (social-ecological model)
- Preliminary sharing of campus research
- Preliminary discussion of case statement
- Decided next steps

Macro social level



Micro biological Level

NIH Office of Behavioral and Social Sciences Research
http://www.thehillgroup.com/OBSSR_Prospectus.pdf

Figure 1. Health as a continuum between biological and social factors across the lifespan. (Adapted from Glass & McAtee, 2006).

Health and Behavior Preliminary Case Statement (draft 1)

- Advances in the life sciences and related technologies will not be meaningful to MA residents and industries unless they lead to environments and practices that sustain the health of individuals and diverse populations.
- Research in the Health and Behavior pillar addresses the creation and application of new knowledge, including cellular/molecular research, animal and human intervention studies, and population-based research. Studies in this pillar also address interactive influences of interventions, technologies, and policies on the environmental and societal level, as well as the impact on improved health and reduced health care costs.



Undertaking innovative science and technology | Supporting sustainable economic growth | Providing a trained workforce | Guiding citizens to health and well being
 Supporting cultural diversity | Contributing to national security | Conserving and preserving the environment | Providing access to quality public higher education

Shared Infrastructure & Additional R & D Thrusts

MASS Stem Cell Initiative

- ❑ hESC Bank
- ❑ hESC Registry

Bioinformatics Cores

Tissue Engineering

Diagnostics

Biomaterials

Computational Sciences

Advanced Therapeutics Cluster

Stem Cell Biology Cluster

- ❑ Research Cores
 - hESC
 - Animal stem cells

RNAi Institute

- ❑ RNAi Translational Research

Gene Therapy Cluster

- ❑ Research Core
- ❑ Gene Delivery Mechanisms

Nanotechnology

Nanomanufacturing Center

- ❑ Plastics & Composites Engineering
- ❑ New Materials & Processes for High Rate Manufacturing
- ❑ Expertise from detection to drug delivery and therapeutics to tissue

Nanomedicine Research Institute

- ❑ Applications of Nanotech to Medicine

Others TBD

Technology Innovation Centers

Industry Support

- ❑ Medical Device
 - M2D2
- ❑ UMB VDC
- ❑ Biotech Incubation
- ❑ Preclinical Pipeline
- ❑ Clinical Trials

Biomufacturing Center

- ❑ Mass Production of viable products with large scale facility
- ❑ UMD business assistance biotech facility

Others TBD

Workforce & Policy Initiatives

Human Capital

- ❑ Life Sciences Talent Initiative
- ❑ STEM Efforts
- ❑ Pipeline Programs
- ❑ Nursing Education & Research

Policy

- ❑ Policy Development & Analysis
- ❑ Minority Health & Health Care Disparities
- ❑ Evaluating the State's Investment in the Life Sciences

Health and Behavior

Individual Health

Family and Community

Society and the Environment

- ❑ Nutrition and Physical Activity
- ❑ Health Behavior and Behavior Change
- ❑ Human Development
- ❑ Gene, Behavior and Environment Interactions
- ❑ Water Quality and Air Quality
- ❑ Impact of Emerging Technologies on Human Health and the Environment

Health and Behavior Next Steps

Health and Behavior

Individual Health

Family and Community

Society and the Environment

Nutrition and Physical Activity

Health Behavior and Behavior Change

Human Development

Gene, Behavior and Environment Interactions

Water Quality and Air Quality

Impact of Emerging Technologies on Human Health and the Environment

- Share inventory of campus grants/projects
- Summarize campus assessment into priorities
- Share priorities in pillar categories based on conceptual framework
- Modify categories if needed
- Establish aspirant vision and request for resources