

## NIEHS Areas of Special Interest for 2004–2005

The NIEHS has identified the areas listed below as areas of special interest. These are areas that have not been the subject of requests for applications (RFAs) or program announcements (PAs) but that are of emerging importance in environmental health science. Applications in these areas will be given special consideration for funding.

Potential applicants are encouraged to contact the appropriate scientific program administrator in the Division of Extramural Research and Training for further information (see “For More Information,” below).



### Obesity and the Environment

Investigate the role of environmental agents in causing and/or exacerbating obesity; develop intervention strategies by improving the built environment and developing sustainable communities.

### Translating Basic Biology to Clinical Studies and Environmental Medicine: The Connection of Environmental Exposures and Clinical Outcomes

Build a research focus emphasizing the etiology and diagnosis of diseases that are due in part to environmental exposures; translate findings in animal models and *in vitro* studies to the association of a clinical outcome with an environmental exposure.

### The Role of Epigenetics in Environmentally Induced Diseases and Dysfunctions

Investigate the role of epigenetics in diseases and dysfunctions that exhibit an environmental component.

### Single-Nucleotide Polymorphisms and Disease Susceptibility

Exploit and expand upon the resources developed in the Environmental Genome Project, launching investigations of disease susceptibility resulting from environmental exposures.

### Environmental Health and the Biology of Aging

Investigate how aging influences the interaction of environmental factors and individual susceptibilities.

### Comparative Toxicogenomics

Define the comparative and integrated responses of organisms to environmental stimuli in order to improve our ability to predict and prevent adverse outcomes in humans.

### Systems Biology Approaches to the Study of the Mechanism of Mixture Toxicity

Develop pharmacokinetic and pharmacodynamic models that describe the effects of toxicants on biological systems using systems biology approaches.

For more information | <http://www.niehs.nih.gov/dert/programs/special/special.htm>