The ILSI Health and Environmental Science Institute (HESI)

Research Areas

- Tool Development
- Biomarker Research
- Basic Research

At a Glance

- Status: Completed Consortium
- Year Launched: 1989
- Initiating Organization: Health and Environmental Sciences Institute
- Initiator Type: Government
- Location: International

Abstract

The ILSI Health and Environmental Sciences Institute (HESI) is an independent, nonprofit institute within the International Life Sciences Institute (ILSI). HESI’s scientific programs bring together scientists from academia, industry, research institutes, foundations, and government agencies to identify and resolve global health and environmental issues.

Mission

HESI is a nonprofit institution whose mission is to engage scientists from academia, government, and industry to identify and resolve global health and environmental issues. As a neutral third-party organization, HESI acts as an objective forum for initiating dialogue among scientists with different perspectives and expertise, in the attempt to create a pathway that can resolve issues identified by its multisector membership and the external scientific community. HESI’s bylaws require that all HESI activities are directed and carried out in an objective manner for the benefit of the public health.

HESI was established in 1989 as an ILSI program and was later established in 1991 as an
independent, charitable, and scientific institute affiliated to ILSI by means of a charter agreement. HESI’s purpose has been to provide an international forum to advance the understanding of scientific issues that could positively impact human health and/or the environment. The issue areas addressed by HESI’s programs have grown in scope and number since its inception in 1989. At its inception, the organization had only one active project, approximately 15 sponsor companies, and approximately the same number of public-sector (academic and government) participants. As of 2013, HESI has representatives from 51 sponsor companies, 90 universities and research agencies, and 33 government agencies from more than a dozen countries around the world participating in HESI programs. HESI currently has 17 different scientific committees that execute close to 80 different research/collaborative activities across them.

Structure & Governance

HESI conducts its work through chartered scientific committees that involve academic, government, and industry scientists. HESI uses multisector scientific committees, managed by professional in-house scientific management staff, to define and address relevant research questions and make the findings available to the public. The organization’s bylaws require representation by the public and private sectors on all of its leadership teams and mandate that at least half of its Board of Trustees be from the public sector. Industry sponsors receive a single seat on the HESI Assembly, which allows them to participate in technical or project committees and to vote on a slate of candidates nominated by the Board to serve as trustees.

The Board of Trustees is a 15- to 31-member board that serves as HESI’s governing body and is composed of a chair and vice chair employed by universities, government agencies, or other public bodies, while the president and vice president are drawn from employees of the sponsoring private sector organizations. The Board also appoints an Emerging Issues Committee to help identify new scientific issues and guide the overall scientific direction of the organization by utilizing a process that includes input from outside the organization and polls of its stakeholders. This committee also has the authority to nominate subcommittees to further evaluate scientific issues and make recommendations to the HESI Assembly.

The Executive Committee oversees the operations in periods between the biannual Board meetings and includes, among others, the president, vice-president, chair, vice-chair, secretary, and treasurer. HESI is run by an executive director who reports to the president of the Board of Trustees and is a
nonvoting member and officer of the Board and Executive Committees. Each project is staffed by one or more HESI project managers who provide professional scientific and administrative support to the programs. The projects are also required to identify public- and private-sector co-leaders or steering groups to help lead the project team in problem formulation, project execution, and communication of results on a volunteer basis.

HESI's scientific programs are conducted by multisector committees that organize, support, and execute collaborative laboratory research programs, workshops, conferences, literature reviews, training, and the development and analysis of databases. Project Committees focus on relatively specific tasks and are formed when subcommittees mature and become self-sufficient, or are created under the guidance of HESI's Board of Trustees through special request from the sponsorship. The formation of Technical Committees for longer-term and broader or more comprehensive focus is also through approval of the Board of Trustees. Committees may exist for as little as one year or for a decade or longer depending on their scope and resources.

**Financing**

The majority of HESI's scientific activity is supported through in-kind contributions of labor, experimental data, and expertise from public- and private-sector participants. Industry sponsors provide the primary financial support for HESI programs. However, HESI also receives financial and significant in-kind support from a variety of U.S. and international government agencies.

HESI's annual sponsorship fees are based on sponsors' worldwide sales (most recently available year-end figures). The HESI Board of Trustees determines annual dues for sponsorship (which currently range from $3,000 to $59,000) and support organization-wide strategic activities and execution of the Board and Emerging Issues Committees. Separate assessments are made for committee sponsorship and are set by the committee members on an annual basis.

**Intellectual Property**

The majority of HESI projects are within the precompetitive space, and thus intellectual property is typically not a concern.
Patients are not directly involved in HESI projects, although some programs involve the use of existing clinical data available from publicly accessible sources.

HESI’s annual project solicitation process seeks to ensure that the organization addresses issues of importance to a broad and constantly evolving scientific community.

HESI seeks to measure the impact of its activities through many mechanisms. HESI conducts annual citation analyses of its published manuscripts (i.e., frequency, impact factor, types of experts and sectors that are citing the papers). When possible, HESI also tracks the incorporation/referencing of its scientific outputs in other published resources of importance such as science advisory board reports (e.g., National Academies), books and reference materials, published regulatory guidances and policies, and general media. HESI also tracks the number and diversity (i.e., sector, global location, technical discipline) of organizations engaging with HESI as a measure of its reach in the international scientific community.

The Stewardship Program, administered by the Program Strategy and Stewardship Committee (PSSC) of the Board of Trustees, reviews the scientific progress, impact, and efficiency of each HESI scientific committee on a semiannual basis (every two to three years) and determines whether the committee will be re-chartered for another two- or three-year term. This review provides a mechanism to ensure high-quality, scientific content of HESI committee work products; encourages a continued focus by each committee on achievable objectives; and seeks to ensure the best use of critical resources.

Consortium homepage
http://www.hesiglobal.org/

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Data Sharing

Each HESI committee deals primarily with nonproprietary or public domain data, which are freely
shared among the committee members. Publications by HESI committees are generally in peer-reviewed journals with public recognition of the fact that they constitute HESI work product. The outcomes of all HESI scientific programs are made publicly available.

HESI’s annual report, peer-reviewed publications, databases, and presentations at international scientific meetings serve as means of communicating findings to the broader scientific community.

**Sponsors & Partners**

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