A Funding Mechanism for Team Science at the National Cancer Institute: Specialized Programs of Research Excellence (SPOREs)

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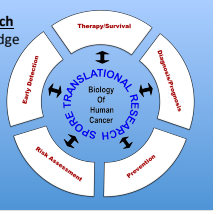
General Information About SPOREs

Features of SPORE Grants

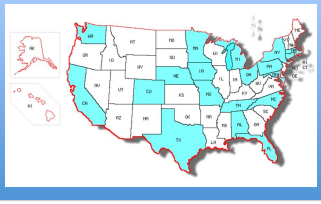
- Specialized multi-component center grants (P50)
- Minimum of 4 translational projects; all projects must reach a human endpoint within 5 years
- SPOREs are usually organized around an organ specific cancer but can also focus on a group of highly related cancers or on cancers connected by a common biological mechanism
- Team science approach: at least one basic and one clinical/ applied co-leader per project
- SPOREs must collaborate via both horizontal and vertical collaborations
- Flexibility to terminate and to replace projects within funding period; this gives the PI an effective management tool to move rapidly to refocus research based upon new knowledge and opportunities in the field
- Core Facilities: Administrative and biospecimen/pathology cores required; other Cores are optional
- Career Enhancement Program: Allows basic and clinical scientists to become involved in translational research
- Developmental Research Program for cutting-edge pilot studies, high risk/high payoff studies, and initiation of collaborations
- External Advisory Board (EAB): experts not affiliated with SPORE or institution
- Often involve input from patient advocates – included in the EAB

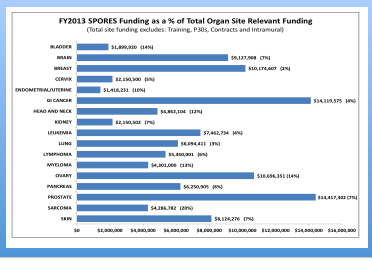
Bi-Directional Translational Research

Translational research uses knowledge of human biology to develop and test the feasibility of cancer-relevant interventions in humans and/or determines the biological Basis for observations made in individuals with cancer or in populations at risk for cancer.



51 SPOREs in 19 states (27 institutions + 1 consortium)





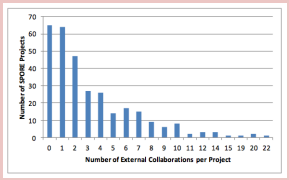
Team Science in the SPOREs

Types of Scientific Teams in the SPOREs

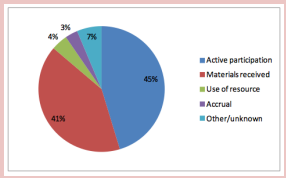
- Basic scientists with clinical/applied investigators as project co-leaders
- Project investigators with resource Core personnel
- Project investigators from one project with investigators from another project
- Inter-SPORE collaborations (both within and outside of the disease)
- Vertical collaborations (with pharma, National Clinical Trials Network, etc.)

Team Science Statistics

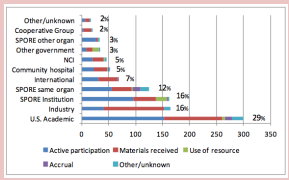
Note: this information was taken from a 2014 report from the Science and Technology Policy Institute (Washington, DC)



SPORE projects are quite collaborative though the number of collaborations is quite variable.



Most collaborations involved the exchange of materials or active participation of personnel in the research.



Shown for external collaborations is the collaborating organization type and the purpose of the collaboration.

Collaborations With Industry

- Cited by SPORE PIs as the most valuable type of external collaboration in which their SPORE engaged
- Contributions from industry: access to drugs/biologics, manufacturing and formulation of SPORE developed compounds for clinical use, providing funding and expertise
- Contributions from SPOREs: preclinical models for testing candidate compounds, tissue resources for biomarker/diagnostic identification, conducting correlative studies, access to patient populations, expertise
- However, barriers to such collaborations included: sudden changes in industry priorities, reluctance of companies to participate in combination trials, risk averse culture in industry, reluctance for companies to engage in rare disease research

Practical Information for Applicants

Key Dates for SPORE Applications

Letter Of Intent	Application Receipt	Peer Review	Council Review
Dec 27, 2014	Jan 27, 2015	May/June 2015	Oct 2015
April 19, 2015	May 19, 2015	Sep/Oct 2015	Jan 2016
Aug 22, 2015	Sep 22, 2015	Jan/Feb 2016	May 2016
Dec 27, 2015	Jan 27, 2016	May/June 2016	Oct 2016
April 19, 2016	May 19, 2016	Sep/Oct 2016	Jan 2017
Aug 22, 2016	Sep 22, 2016	Jan/Feb 2017	May 2017

Note: SPORE grants are funded once per year

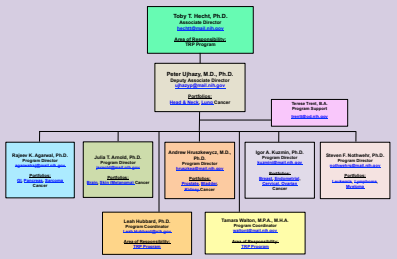
SPORE Eligibility

- Domestic institutions with strong basic and clinical research expertise
- Access to cancer patient population
- Institutional commitment
- Minimum Research Base: Four investigators who have a significant role in a SPORE must have an independently funded peer-reviewed grant or serve as an overall chairperson or site chairperson on an active clinical trial sponsored by NIH/NCI

SPORE Director(s) Qualifications

- Recognized scientific leader in the field
- Basic or clinical/applied investigator
- Provides leadership and direction to the SPORE
- Oversees and conducts planning activities
- May act as a project co-leader, co-investigator, or core director
- Appropriate time commitment (≥ 2.4 calendar months)

Translational Research Program Office Organization



Additional Information About the SPORE Program

TRP:
http://dctd.cancer.gov/ProgramPages/trp/default.htm

SPORE:
http://trp.cancer.gov

ASSIST:
https://public.era.nih.gov/assist/

Office of Extramural Research (OER):
http://grants.nih.gov/grants/oer.htm