

# ORDE "KNOW YOUR AGENCY" SERIES: NATIONAL CANCER INSTITUTE

Agency Site: <http://www.cancer.gov>

## OVERVIEW

The National Cancer Institute (NCI) is the largest component within the National Institutes of Health (NIH) with a budget totaling over \$5 billion. Located in Bethesda, MD, NCI is charged with coordination of the National Cancer Program – providing support for research, both internal and external to the Institute, and serving as a trusted information source for the medical community and the public.

Created in 1937 through the National Cancer Act and signed into law by Franklin Roosevelt, NCI was then incorporated into the NIH in 1944. The National Cancer Act of 1971 created the National Cancer Program, providing NCI with additional funding and responsibilities in the federal government's efforts to fight cancer (*Source: NCI History*).

### *Specific Interests*

NCI supports basic, clinical, and translational research in cancer biology, detection, treatment, diagnosis, and prevention/control. They fund Cancer Centers across the nation including the one at the University of Colorado Denver, and provide funding to train cancer researchers and clinicians.

### *Approach*

NCI supports external research efforts – providing research funding to universities, medical institutions, non-profit organizations, and industry. The agency uses a variety of funding announcements to advertise specific interests including requests for applications, requests for proposals, program announcements, and general program descriptions. NCI also supports internal research efforts at the NIH Clinical Center and NCI laboratories.

## AGENCY ORGANIZATION

Within the structure of NIH, NCI's Director, with his leadership team, sets the vision for the Institute and deploys budget resources responsive to that vision. NCI has a variety of advisory groups; the ones most important to extramural researchers are:

- **National Cancer Advisory Board**, responsible for advising the NCI Director and providing second tier review of grants and cooperative agreements
- **NCI Board of Scientific Advisors**, responsible for making recommendations on extramural research priorities from a scientific viewpoint
- **NCI Council of Research Advocates**, responsible for providing the Director with non-scientific perspectives that represent cancer patient interests

NCI houses five extramural research divisions (dollar amounts listed were Fiscal Year 2015 obligations):

- Division of Cancer Treatment and Diagnosis (\$1.1B)
- Division of Cancer Biology (\$768M)
- Division of Cancer Control and Population Sciences (\$482M)
- Division of Cancer Prevention (\$319M)
- Division of Extramural Activities (\$86M)\*

\*The Division of Extramural Activities at NCI is responsible for coordination of peer review and oversight after award.

(*Source: 2015 NCI Budget Fact Book*)

## NCI GRANTS PROCESS

NCI offers a range of funding mechanisms including research project grants (R01), small grants (R03), exploratory/developmental research projects (R21), program project grants (P01), and center grants and contracts. Career (K) awards are also offered as are individual and institutional training grants. Applications are submitted electronically. Funding ranges depend on the grant mechanism and announcement requirements. Grants generally last 3 to 5 years. While K Awards (with the exception of the K99) require US citizenship or permanent residency, most NIH grants are open to investigators employed in the US regardless of citizenship.

### *FY 2015 Awards/Success Rates*

NCI received 9,525 research project grant applications (new or competing renewal), and funded 1,236 for a success rate of 13% in FY 2015. New grant applications had a 12.2% success rate while the competing renewal success rate was 25%. (*Source: 2015 NCI Budget Fact Book*)

### Contact with Agency Program Staff:

NCI encourages principal investigators (PIs) to have open discussions with Program Directors from an early stage of project development on topics including how your proposed project relates to NCI priorities, questions about your budget, and how to choose the most appropriate study section. Following peer review, Program Directors can often provide more specific details about reviewer comments on your summary statement.

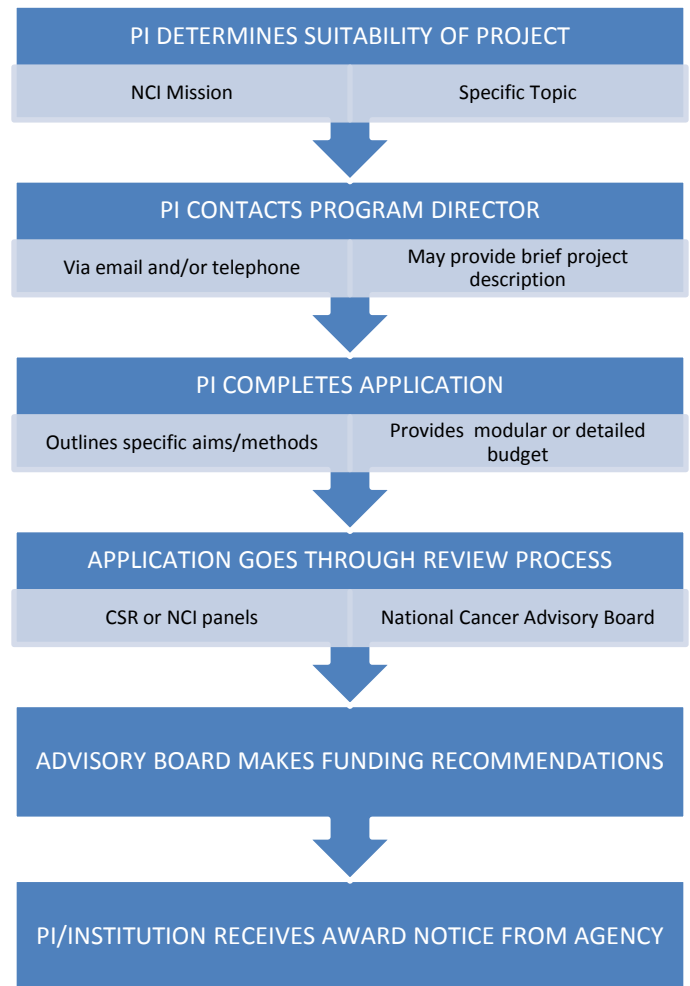
### Typical NCI Application Process:

- 1) PI determines suitability of proposed project to NCI mission and specific topic area(s)
- 2) PI contacts Program Director with questions
- 3) PI completes application
- 4) Application goes to NIH Center for Scientific Review (CSR) or is reviewed by NCI special review panels, depending on grant mechanism
- 5) Assigned reviewers provide preliminary impact scores and review comments; scores determine if application is discussed at review meeting
- 6) Peer review meeting takes place, led by Scientific Review Officer (SRO); best applications are discussed and study section members provide impact scores for each discussed application
- 7) Best scored applications are reviewed by the National Cancer Advisory Board (second tier review)
- 8) Advisory Board makes funding recommendations
- 9) Successful PI/institution receive award notice

### Application Review Process:

Most NCI applications are reviewed by Scientific Review Groups (aka study sections) organized by the CSR. NCI staff members organize an alternate review process for applications submitted in response to RFAs, fellowships, program projects, training/career awards, and multi-center clinical trials. Review criteria include significance, investigator(s), innovation, approach, and environment. Up to three reviewers are assigned to read/evaluate an application, and provide a preliminary impact score. Preliminary scores determine which applications are discussed at the study section meeting. Each application discussed receives a final impact score from **all** study section members. Applications that score within funding limits set for that round then go through a second tier peer review process performed by the National Cancer Advisory Board.

## AGENCY PROPOSAL & REVIEW PROCESS



### What Happens Next?

PIs may follow review process results via the NIH electronic grants management system, e-Commons. Once initial peer review has concluded, PIs receive summary statements. Those who are within or close to the funding parameters of the Institute will be asked to provide additional information concerning current support levels, and human or animal subjects as applicable (known as "Just in Time"). PIs then receive award notifications.

Those who are not funded will review their summary statements, begin to think about how best to address reviewer concerns, and then talk with Program Directors to ascertain further details about the review. Discussing results with mentors and colleagues will be helpful in determining if resubmission is a good choice.