The NIH Review and Funding Process

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National Institute of Diabetes and Digestive and Kidney Diseases

The NIH Structure and Funding Process

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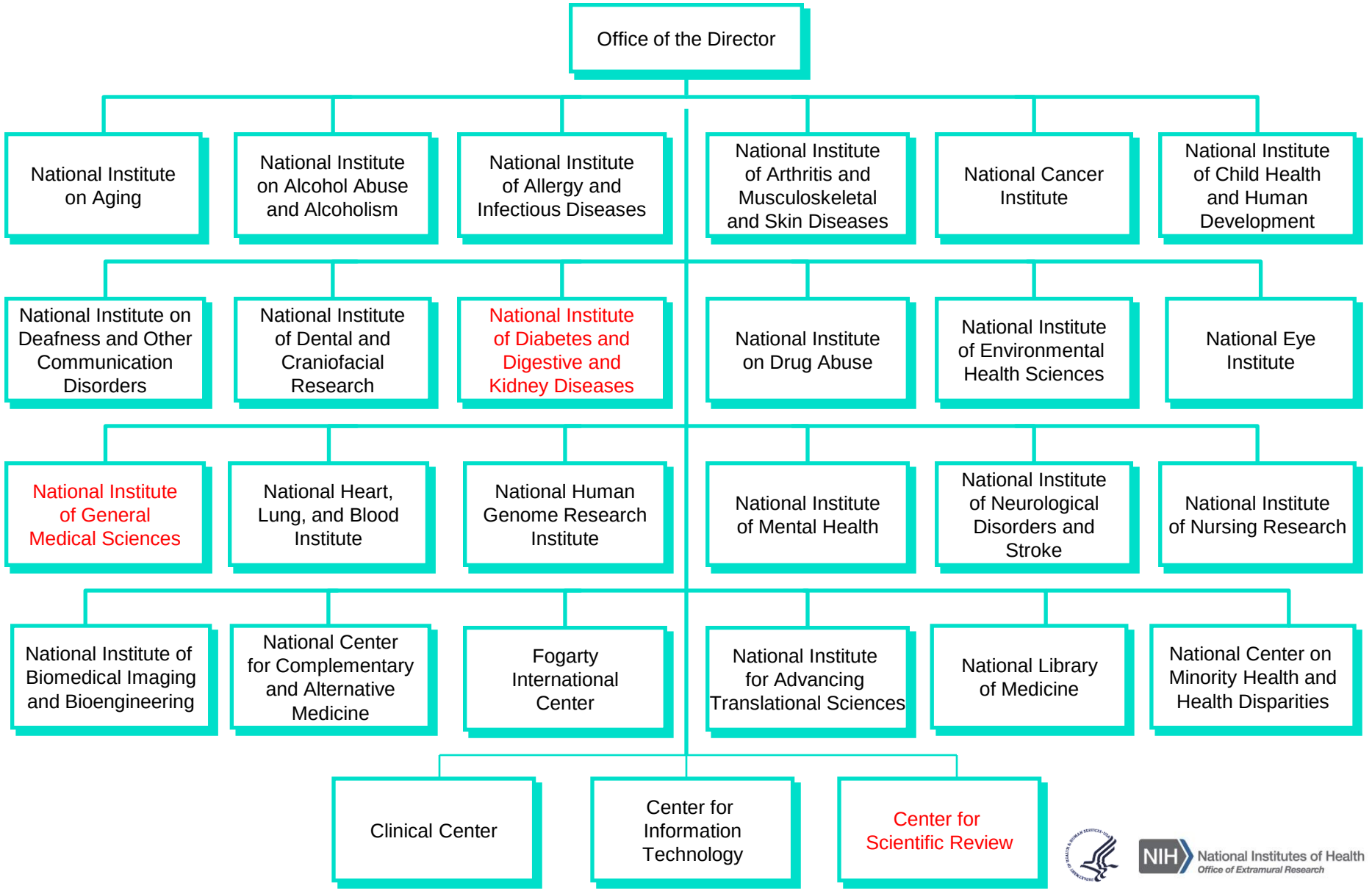
National Institute of
Diabetes and Digestive
and Kidney Diseases

National Institutes of Health

Much of the biomedical research in the United States is supported by the Federal government, primarily the National Institutes of Health (NIH)

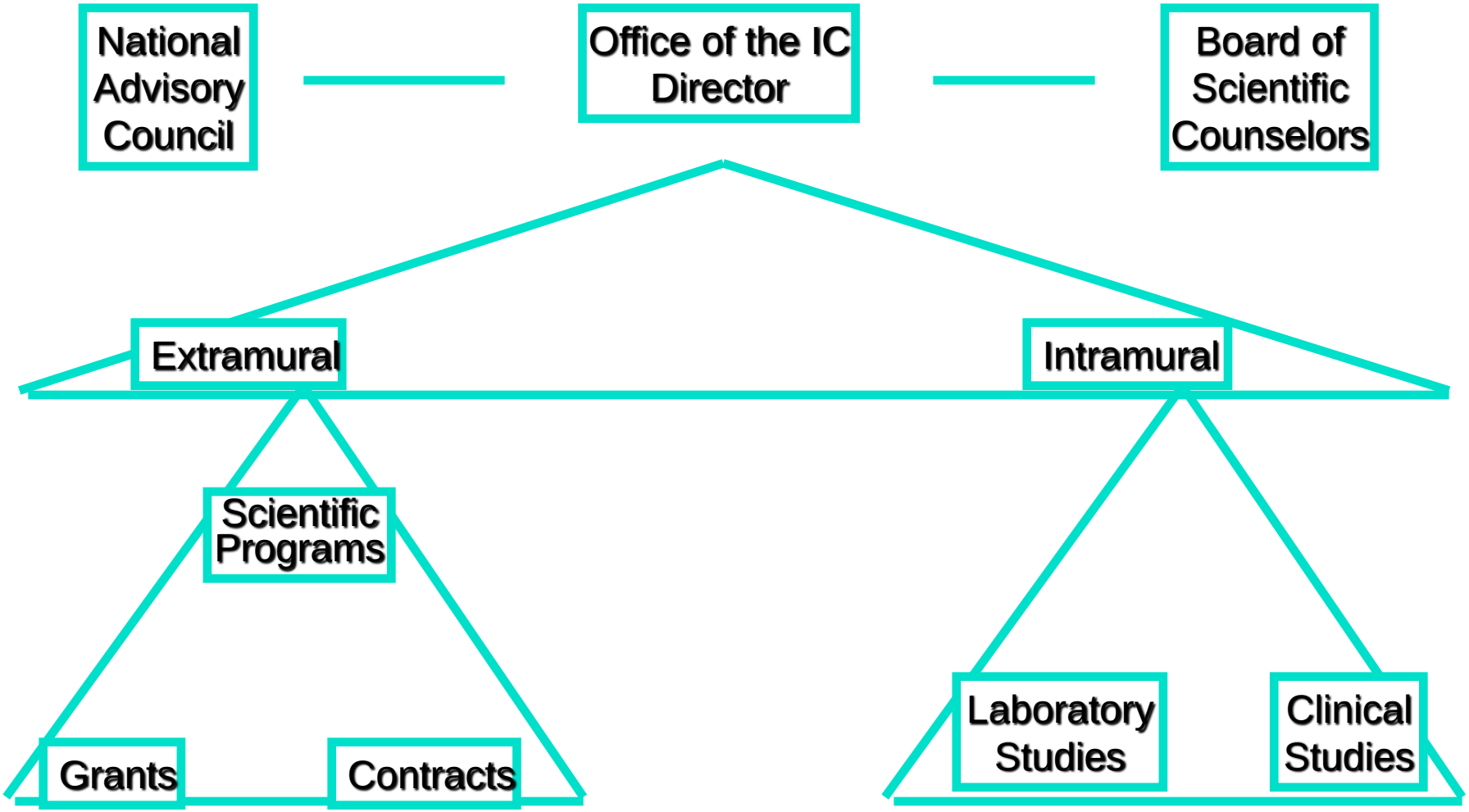
National Institute of Diabetes and Digestive and Kidney Diseases

National Institutes of Health



NIH National Institutes of Health
Office of Extramural Research

A Typical Institute/Center



FY 2014 Budget & Paylines

NIH

	FY 2013	FY 2014	Change
Total Program…….	$29.15B	$30.15B	$1.0B

NIDDK

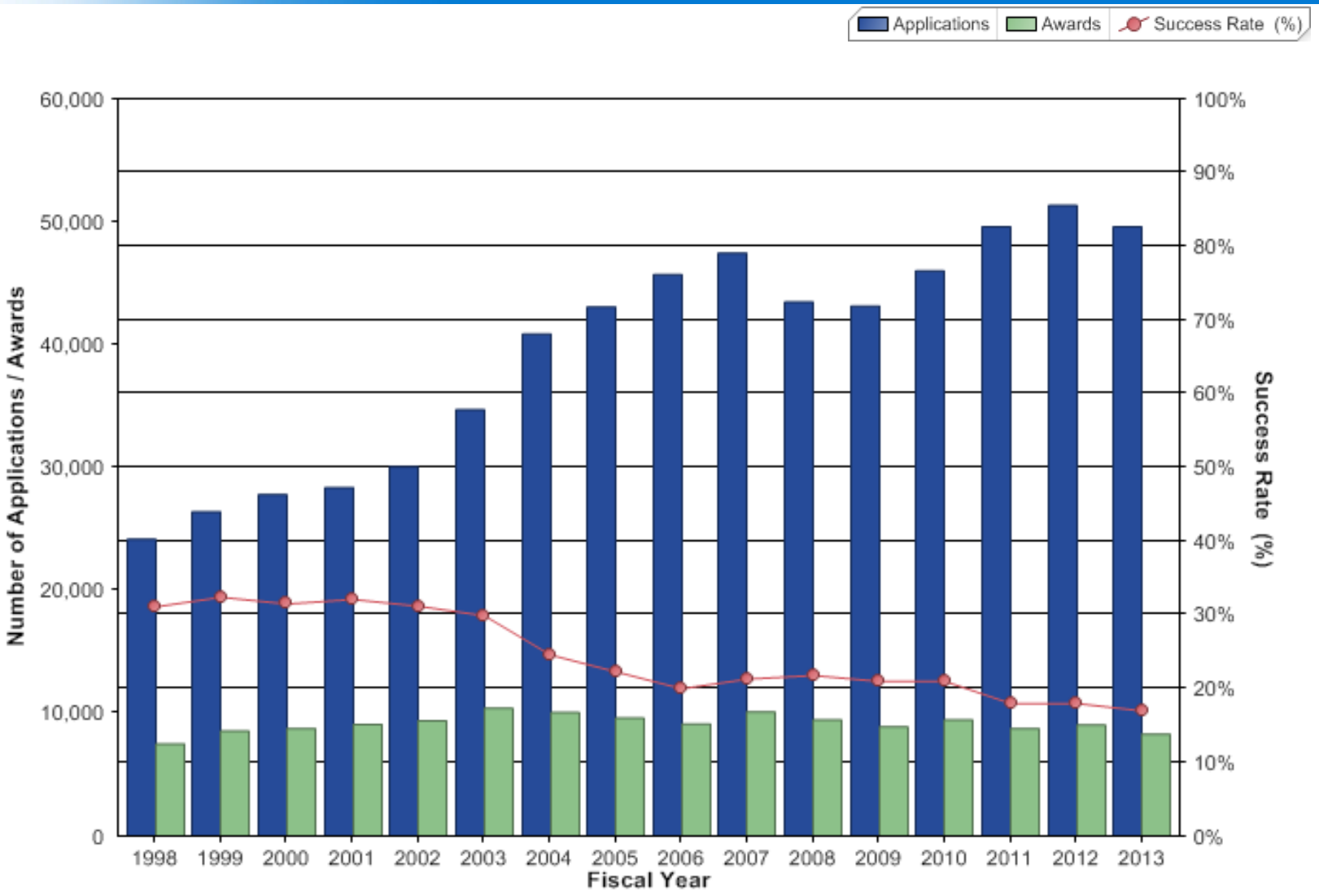
Total Program…….	$1.835B	$1.881B	$46.1M

NIDDK Paylines

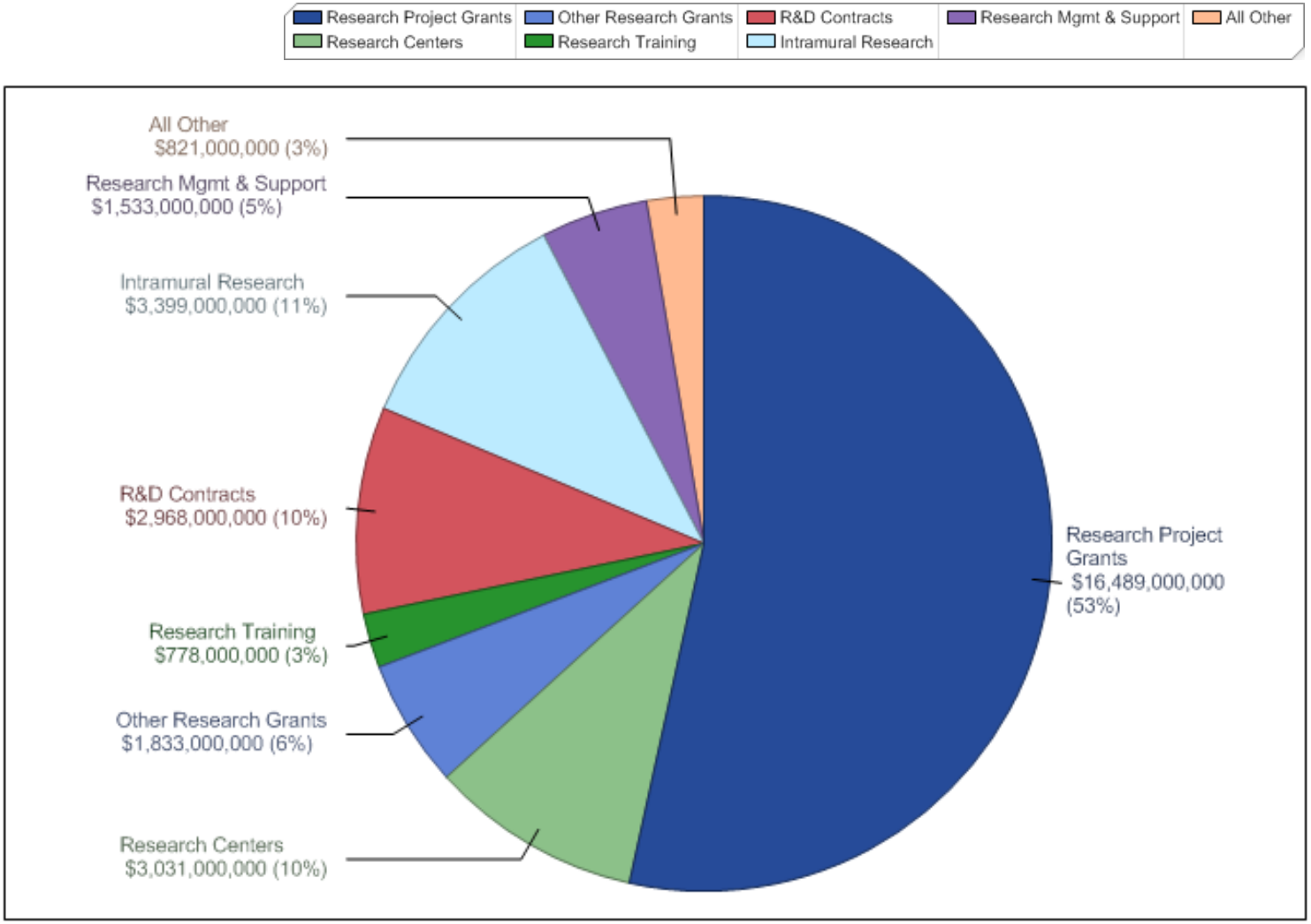
Nominal……	11th	13th
ESI……..	16th	18th

National Institute of Diabetes and Digestive and Kidney Diseases

Research Project Grants
Competing applications, awards, and success rates

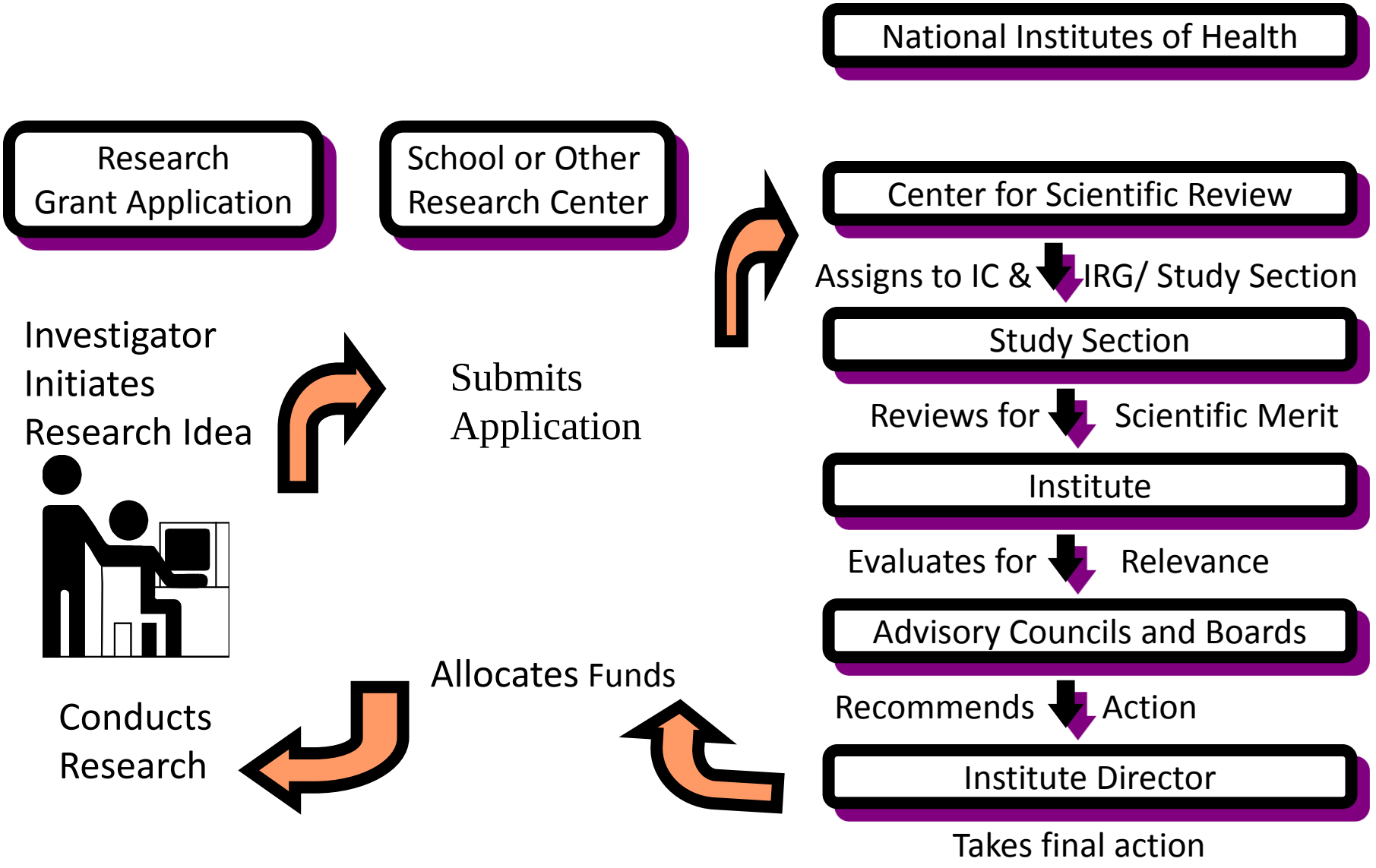


Total NIH budget authority FY 2012 enacted



Microsoft Office
Excel Worksheet

Review Process for a Research Grant



Review System for Grant Applications

Scientific Review Group (SRG)

- Independent outside review
- Evaluate scientific merit, significance
- Recommend length and level of funding

1st level

Output: Priority Score and Summary Statement

3 - 7 months

Advisory Council

- Assess quality of SRG process
- Offers recommendation to Institute Staff
  - Evaluates program priorities and relevance
  - Advises on policy

2nd level

Output: Funding Recommendations

1 - 3 months

Institute Director

- Makes final decision based on Council input, programmatic priorities
- Must also Pass Administrative Review

Output: Awards or Resubmission

Top Ten Tips for Grant Seekers

Tip #1

In order to apply to the NIH for funding, you must have an appointment at an institution (student, postdoc, instructor, professor, etc.) – NIH awards go to the 'applicant organization,' not individuals.

Tip #2

See if your research falls within an IC mission by viewing the Research Programs and Contacts that usually can be found at the IC website.

Tip #3

Find the appropriate grant mechanism to support your research (e.g. Research Project R01, P01; Small Business - R41, R42, R43, R44; Training and Career Development - F, K, T; Centers - P20, P30. http://grants.nih.gov/grants/funding/funding_program.htm

Tip #4

View Current Funding Opportunities. Examples from NIDDK website

K99/R00 -Pathway to Independence Award (PA-16-193)

F32 - Ruth L. Kirschstein National Research Service Award (NRSA) Individual Postdoctoral Fellowship (PA-16-307)

RO1 -Biomarkers for Diabetes, Digestive, Kidney and Urologic Diseases Using Biosamples from the NIDDK Repository (PAR-13-228)

Tip #5

Contact the program director identified in the funding opportunity.

Continue- Top Ten Tips for Grant Seekers

Tip #6

Learn more about peer review: The Center for Scientific Review (CSR) offers great resources to assist planning, writing and submitting grants (e.g. http://public.csr.nih.gov/Pages/default.aspx) If asked to review grants say, “Yes!" serving as a reviewer is a great way to learn how to write a better application.

Tip #7

Register. In order to apply for a grant, both you and your organization need to register with grants.govExternal

Tip #8

Identify, contact, and engage appropriate colleagues who will play a role in the proposed study (e.g., co-investigators, collaborators, mentors). Request letters of reference and support well in advance.

Tip #9

Start writing early, and get feedback from your mentors and colleagues. Follow the application instructions carefully, including the page limits. Put your CV into the NIH biosketch format

Tip #10

Submit the completed application to your grants office according to your institution’s timeline. Once submitted, CHECK the application online to make sure everything looks correct. The NIH does not allow to modify the submitted material after the receipt date.

Review Criteria

Significance. Does the project address an important problem or a critical barrier to progress in the field? Is there a strong scientific premise for the project? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?

Investigator(s). Are the PD/PIs, collaborators, and other researchers well suited to the project? If Early Stage Investigators or New Investigators, or in the early stages of independent careers, do they have appropriate experience and training? If established, have they demonstrated an ongoing record of accomplishments that have advanced their field(s)? If the project is collaborative or multi-PD/PI, do the investigators have complementary and integrated expertise; are their leadership approach, governance and organizational structure appropriate for the project?

Innovation. Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?

Approach. Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Have the investigators presented strategies to ensure a robust and unbiased approach, as appropriate for the work proposed? Are potential problems, alternative strategies, and benchmarks for success presented? If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed? Have the investigators presented adequate plans to address relevant biological variables, such as sex, for studies in vertebrate animals or human subjects? If the project involves clinical research, are the plans for 1) protection of human subjects from research risks, and 2) inclusion of minorities and members of both sexes/genders, as well as the inclusion of children, justified in terms of the scientific goals and research strategy proposed?

Environment. Will the scientific environment in which the work will be done contribute to the probability of success? Are the institutional support, equipment and other physical resources available to the investigators adequate for the project proposed? Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?

Scoring System

Reviewers have been instructed to score each of five review criteria, and the overall impact/priority of each application, on a 9-point rating scale according to the following descriptions and additional guidance:

Score	Descriptor	Additional Guidance on Strengths/Weaknesses
1	Exceptional	Exceptionally strong with essentially no weaknesses
2	Outstanding	Extremely strong with negligible weaknesses
3	Excellent	Very strong with only some minor weaknesses
4	Very Good	Strong but with numerous minor weaknesses
5	Good	Strong but with at least one moderate weakness
6	Satisfactory	Some strengths but also some moderate weaknesses
7	Fair	Some strengths but with at least one major weakness
8	Marginal	A few strengths and a few major weaknesses
9	Poor	Very few strengths and numerous major weaknesses

Minor Weakness: An easily addressable weakness that does not substantially lessen impact
Moderate Weakness: A weakness that lessens impact
Major Weakness: A weakness that severely limits impact