

National Institutes of Health

Success Rates, Percentiles, Paylines

...and your chances of being funded

What is a success rate?

In order to be able to make comparisons across years of funding, NIH uses a number called a **success rate**. It is used with research grants, research project grants (RPGs), or specific types of research project grants such as the R01 — in order to track progress. The calculation is straightforward. It reflects differences in the ways individual institutes make funding decisions based on their different budgets, research priorities, or funding practices. These individual IC differences account for differences in the success rates across ICs.

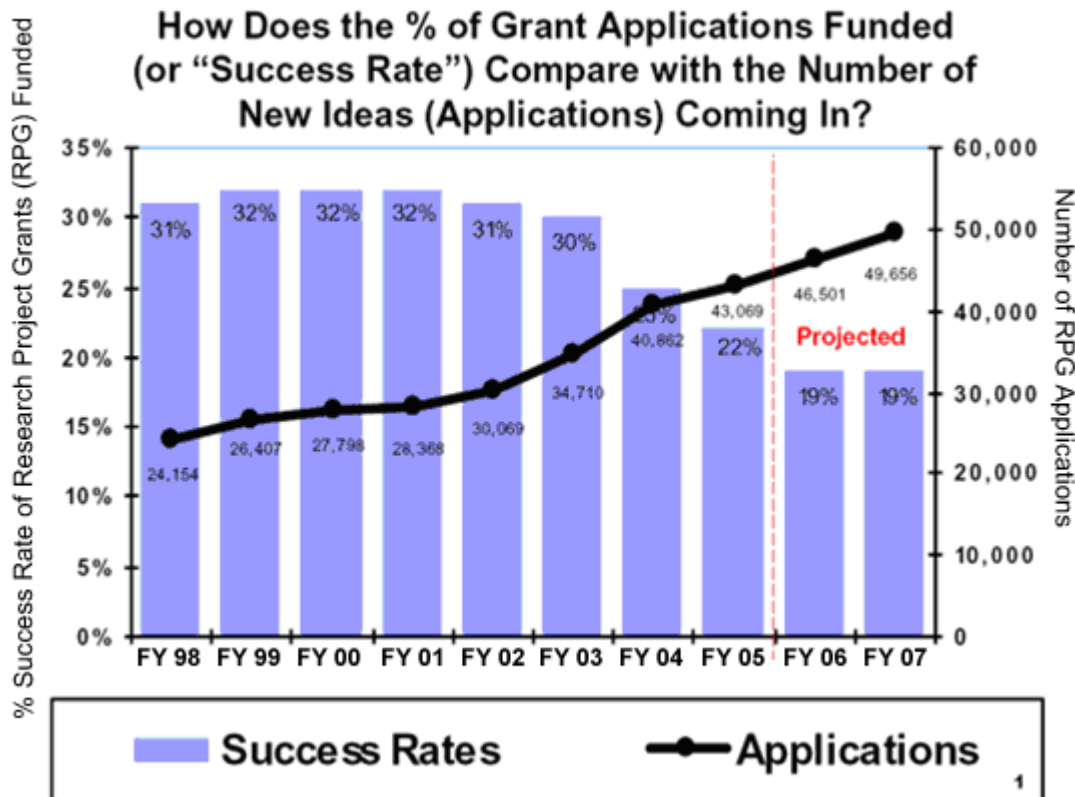
How is success rate calculated?

NIH calculates success rates by dividing the number of applications selected for funding by the total number of applications reviewed. So, the success rate is highly dependent upon the number of applications that are submitted to NIH for review.

$$\text{SR} = \frac{\text{applications selected for funding}}{\text{unique applications reviewed}}$$

How is the success rate affected by an increase in applications or a drop in available funds?

In a year in which the number of applications increase, but the funds available to make awards do not, the success rate may fall significantly.



How is a percentile ranking different from the success rate?

Percentile ranking is a simple measure of how well a particular grant did in comparison to other grants reviewed in the **same** standing study section. Percentiles indicate the relative rank of the grant in that study section. If an application receives a score that ranks it in the 5th percentile, it is considered to be more scientifically and technically meritorious than 95% of the applications in the group.

What are paylines?

In order to provide some predictive guidance to potential grantees, some institutes and centers publish, ahead of the funding cycle, a rank up to which they intend to fund the a majority, if not all the grants applications assigned to them. This payline, sometimes called a percentile cutoff, will vary from institute to institute, based on each individual institute's budget and previous funding commitments. Each of the institutes providing a payline, calculate a payline by considering both the total number of applications assigned to the institute as a whole, (and in some cases for specific programs) and the average cost of awards. As you can see, this is a strategy to determine likelihood of funding, not a definitive funding line. This payline reflects the amount of money available for competing awards in that specific institute on in that institute's scientific area.

So, how does NIH decide what to fund?

Payline is only an approximation to help you see, roughly, where the funding will be, it is not a guarantee of funding or of non-funding. These considerations include, in no special order:

- Relevance of the program to the mission of the institute/center
- Portfolio balance
- Program priority
- Availability of funds
- Scientific and technical merit of the application as assessed by peer review.

With the advice of their Advisory Councils, each of the 24 NIH ICs that fund grants applies these factors in a way that, in their judgment, best accomplishes their respective and different missions.

Do the NIH success rates and the individual IC paylines differ?

Yes, it is not unusual to see large differences between the percentile payline for a specific institute or center and the projected success rate for NIH as a whole.

So, what are your chances of getting funded?

Your best advisor on this issue, because of the differences in the ICs and programs, is the NIH program official. Discuss your ideas, early. We encourage you to ask. The name and contact information for that individual can be found on the web site for the IC that matches your research interests. All the links can be found on the NIH home page at <http://www.nih.gov/>, under Institutes and Centers. There you will find a description of the major programs of each IC. General information on the financial operations plans for any year for individual institutes and centers is posted at the Extramural Financial Operations Plan Web Page at <http://grants2.nih.gov/grants/financial/>. This site also includes the prospective paylines.

