NCI FY2011 Competing R01 Applications and Awards

Figure 1: All Investigators: Experienced, New and Early Stage

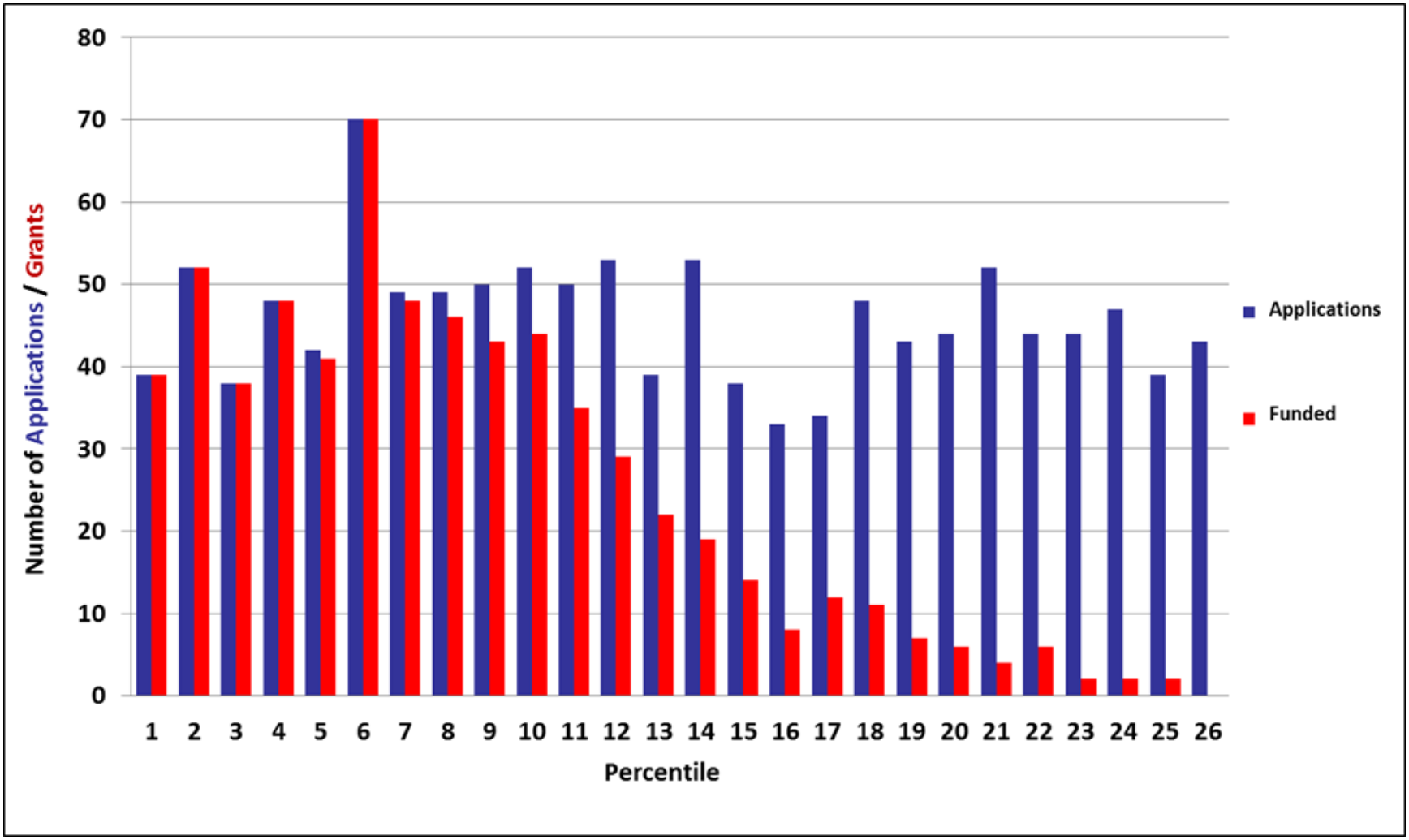

Figure 1 includes data from all categories of investigators: experienced investigators who have had NIH grants in the past, new investigators who previously have not had a substantial independent NIH award, and early stage investigators who are within 10 years of completing their training and have not had a previous grant. If applications from only experienced investigators are considered, the same pattern of funding success is observed (Figure 2).

Fiscal Year 2011 R01 and R21 All Investigators Success Rates

	Total Applications	Number with Percentiles of 25 or better	Number with Percentiles of 10 or better	Funded	Success Rate
R01 – All Investigators	**4,477**	**1,145**	**487**	**652**	**15%**
Experienced Investigator - Total	**3,005**	**837**	**396**	**468**	**16%**
Type 1	**2,440**	**586**	**265**	**314**	**13%**
Type 2	**565**	**251**	**131**	**154**	**27%**
*New Investigator	**1,472**	**308**	**91**	**184**	**13%**
**Early Stage Investigator	**545**	**143**	**37**	**91**	**17%**
R21 - All Investigators	**2,242**	**484**	**201**	**223**	**10%**
Experienced Investigator	**780**	**222**	**97**	**106**	**14%**
New Investigator	**1,462**	**262**	**104**	**117**	**8%**

Total applications include all new and competing renewals that received a percentile, those with just an impact score as well as triaged or not recommended for funding.
When an amended application is considered in the same fiscal year as the original, only the one with the better percentile is counted.
*** Includes Early Stage Investigators**
****Included in New Investigators**

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Figure 2: **Experienced Investigators**

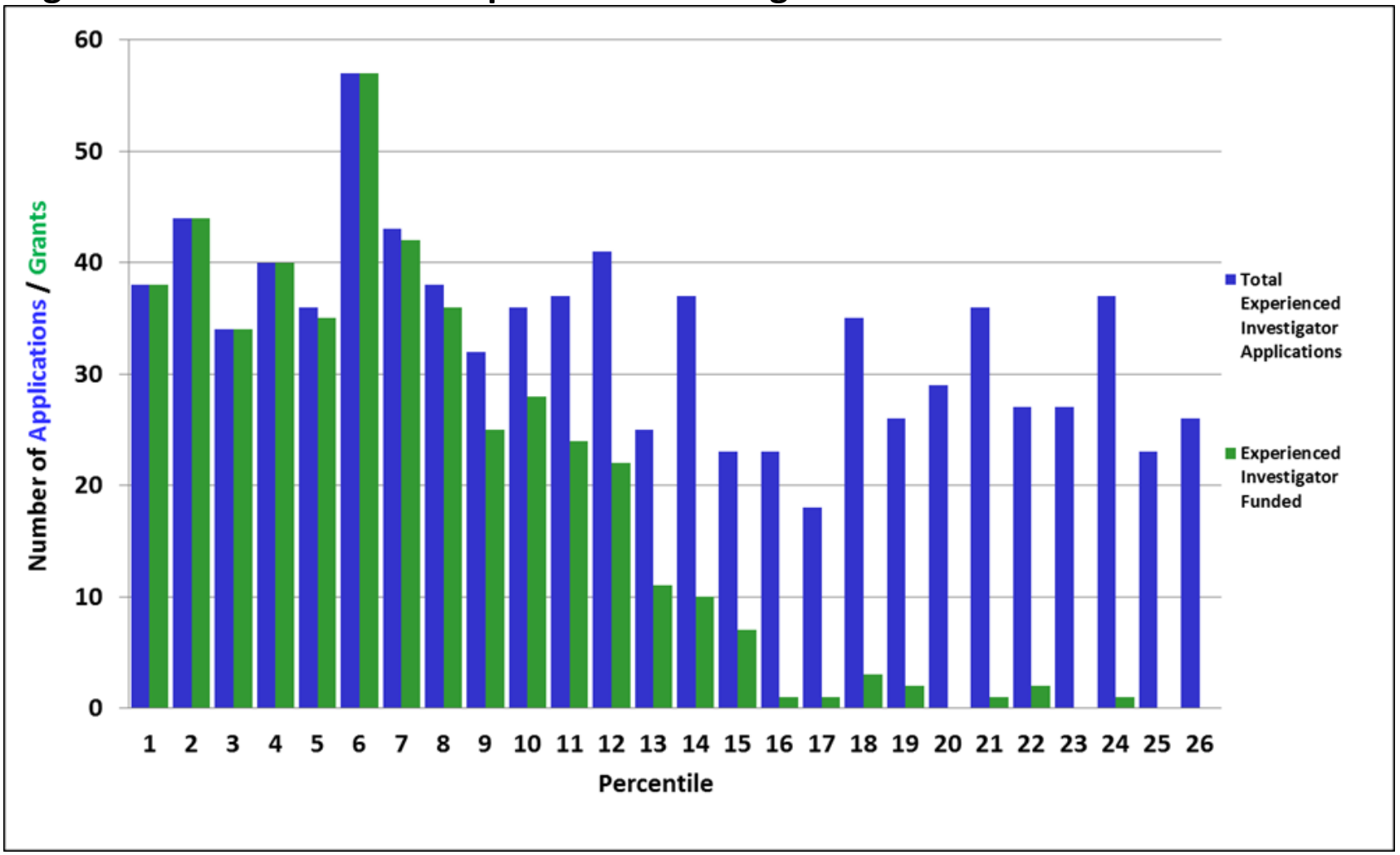

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Figure 3: New Investigators (Includes Early Stage Investigator)

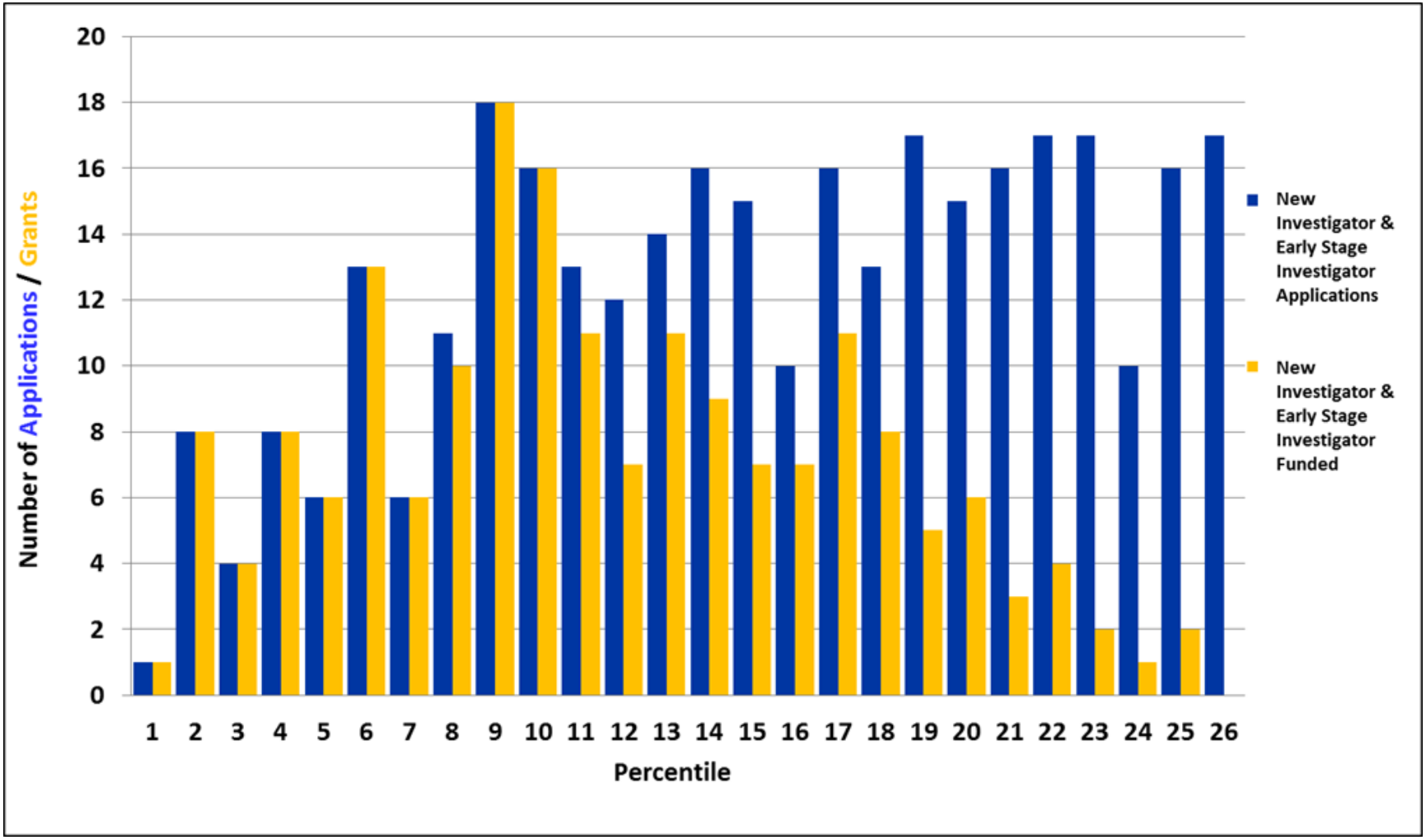

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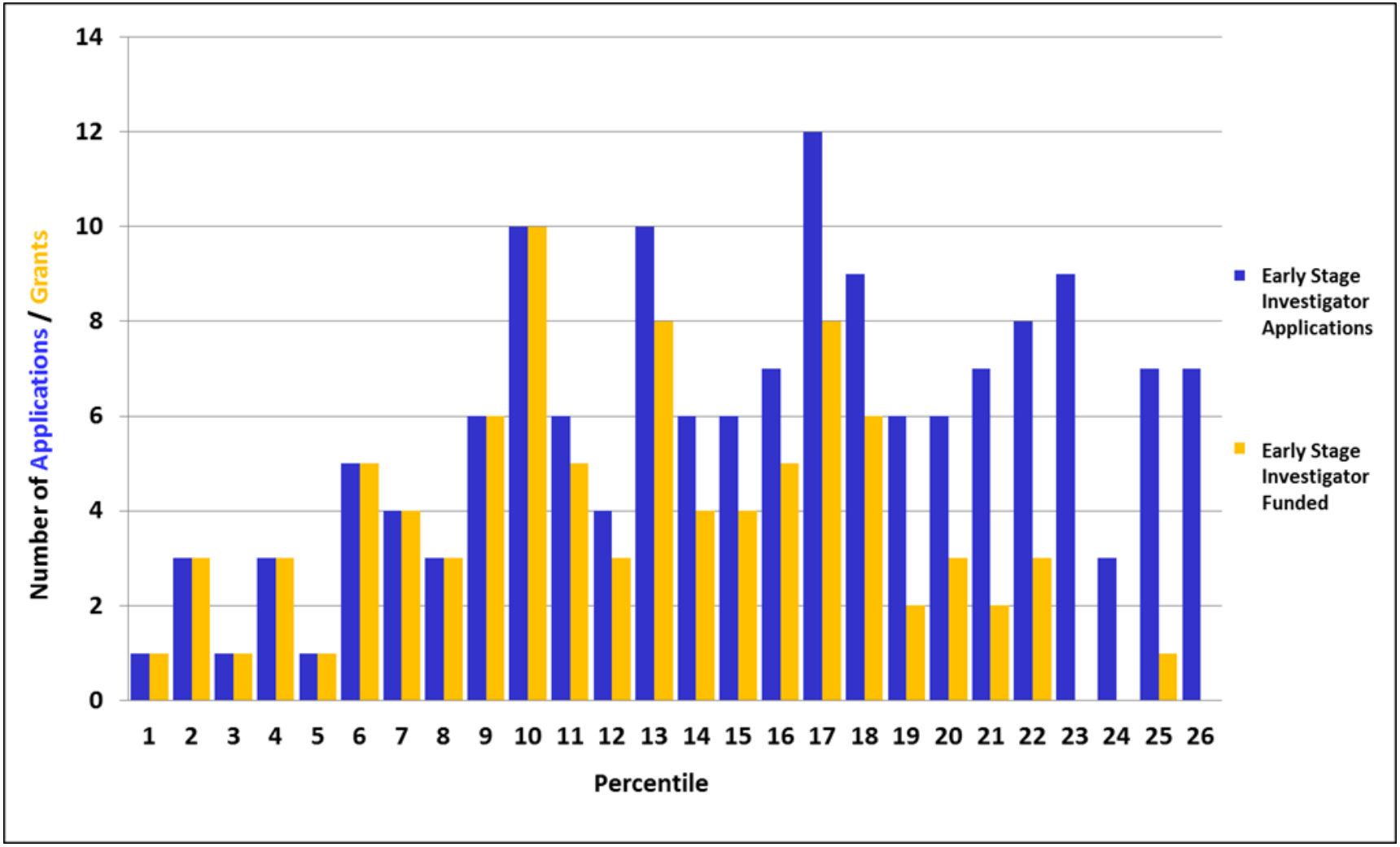
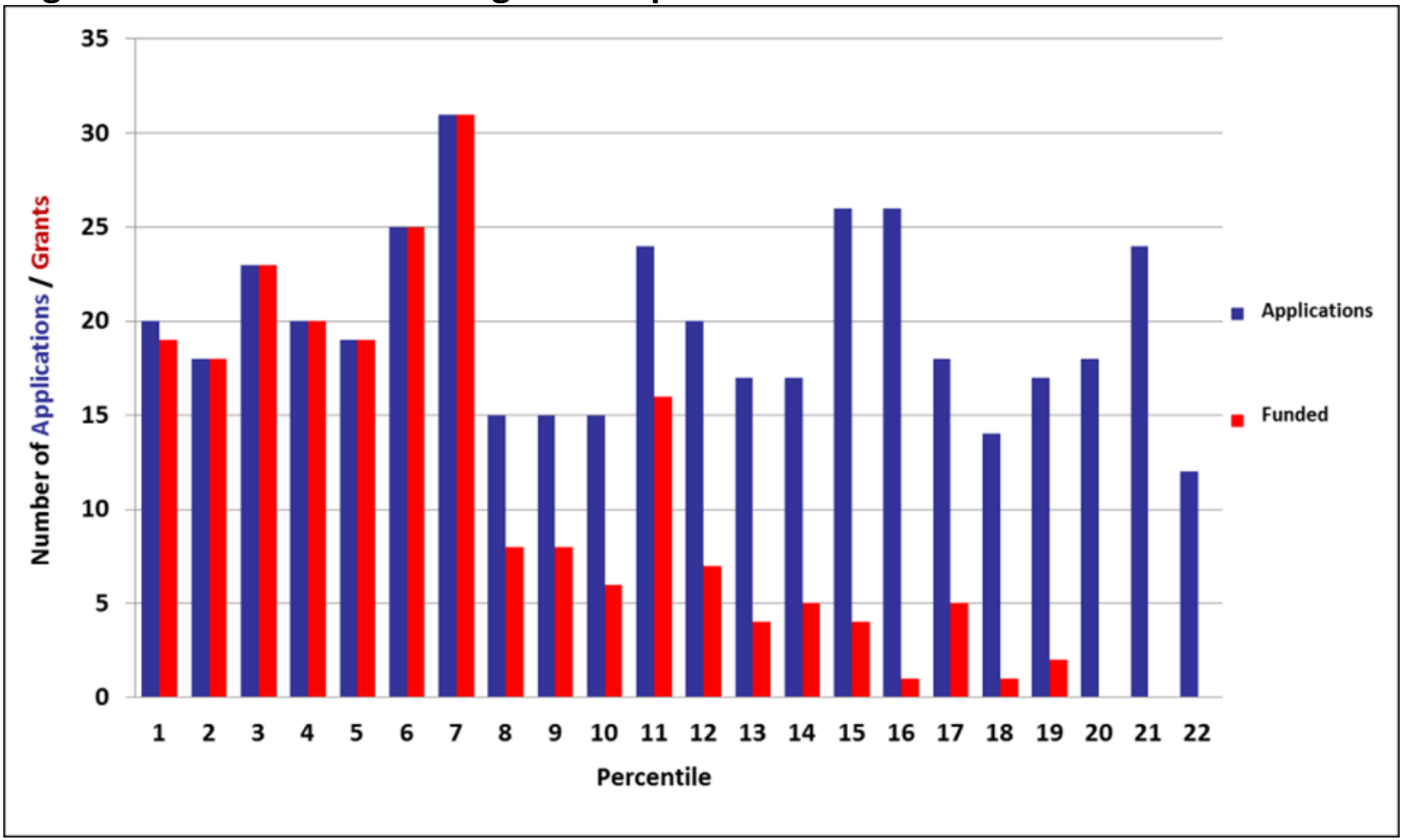
Figure 4: Early Stage Investigators



Figures 1-4: Excludes applications that did not receive a percentile ranking. When an amended application is considered in the same fiscal year as the original, only the one with the better ranking is counted.

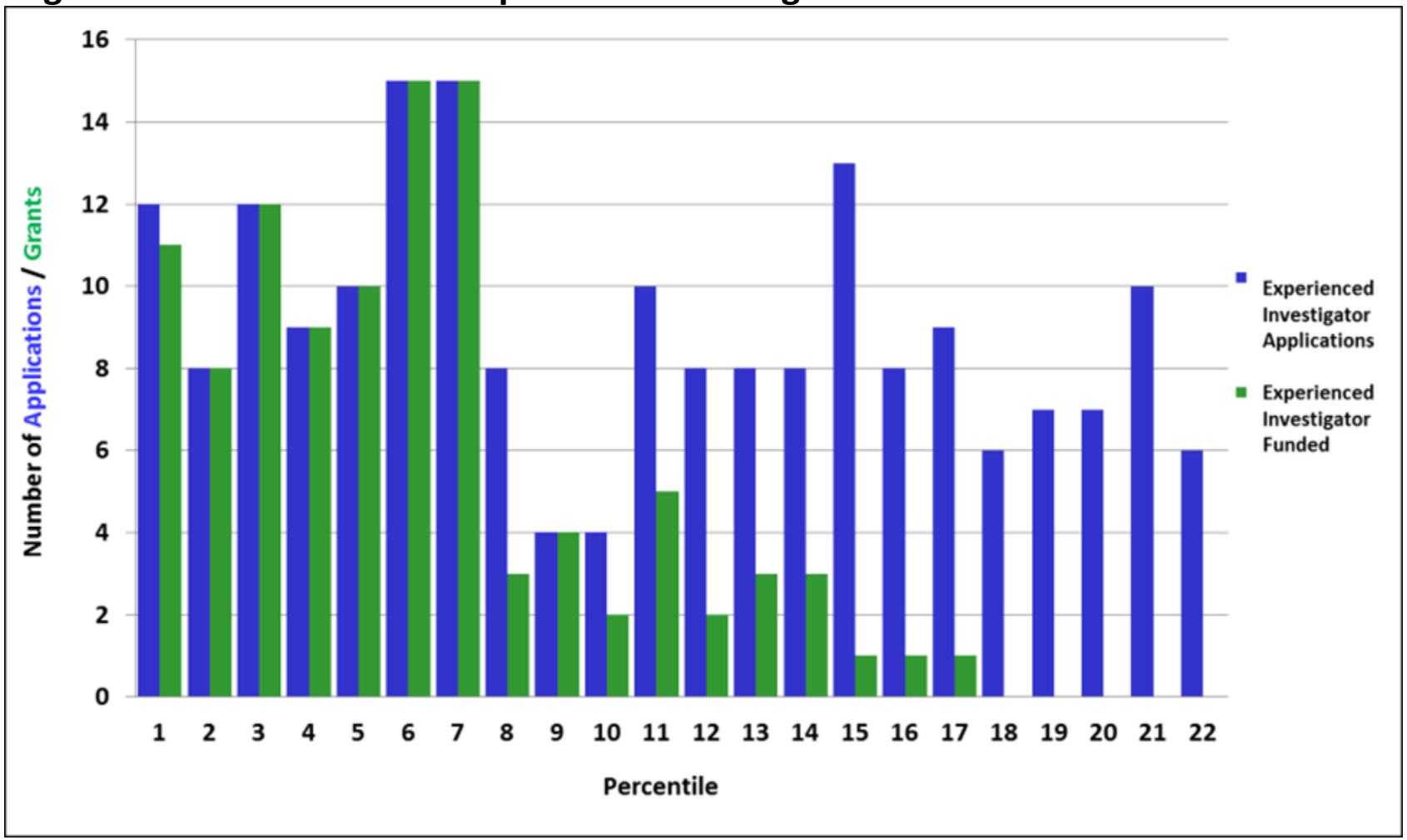
NCI FY2011 Competing R21 Applications and Awards

Figure 5: All Investigators: Experienced and New



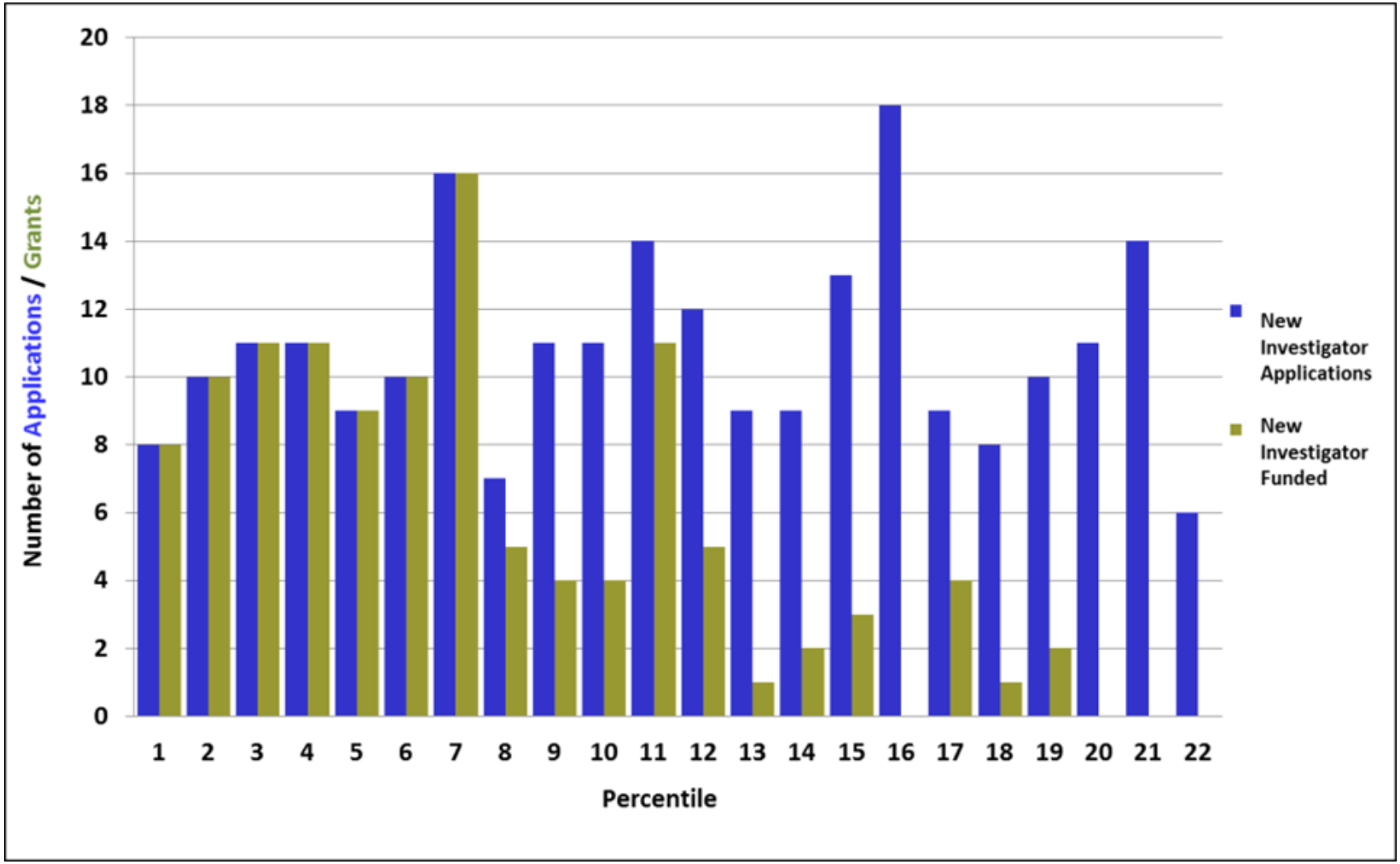
NCI FY2011 Competing R21 Applications and Awards

Figure 6: Experienced Investigators



NCI FY2011 Competing R21 Applications and Awards

Figure 7: New Investigators



Figures 5-7: Excludes applications that did not receive a percentile ranking. When an amended application is considered in the same fiscal year as the original, only the one with the better ranking is counted.

Beginning in 2011, NCI adopted a new approach to the selection of grant applications for funding that sets a zone within which nearly all applications are selected for funding. In both 2011 and 2012, that zone extended to the 7th percentile[1]. Beyond that point, all applications are considered, resulting in a final success rate[2] of 15% in 2011. The tables below summarize the overall funding patterns for RO1s and R21s in various categories of investigators.

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1 A percentile is a score that ranks competing applications against others in the same study section in the past year. It is intended to allow a comparison of impact scores of applications across all study sections. The impact score is given by scientific reviewers based on the overall impact that the project is likely to have on the research field(s) involved.

2 The success rate is the percentage of applications that are funded. It is calculated by dividing the number of funded grants by the number of applications received. When an amended application is considered in the same fiscal year as the original, only the one with the better score is counted in the number of applications received.

Funding Patterns for RO1 applications

The table in Figure 1 below summarizes the number of RO1 applications received and grants funded at each percentile, among all investigators. As is evident, the number of grants funded decreased in direct proportion to the percentile ranking. Nevertheless, 48% of the grants funded had rankings beyond the 7th percentile.

In striking contrast, if R01 applications only from new investigators (Figure 3) or only from early stage investigators (Figure 4) are considered, there is a much broader spread in the percentile rankings of applications, extending to higher percentiles, that were selected for funding. This distribution, across a wide range of scores, reflects NCI's commitment to ensuring that the overall success rate for new investigators approximates that for established investigators.

Funding patterns for R21 grant applications

The funding patterns for R21 grant applications differ markedly from those of the RO1. This difference is explained by the fact that NCI receives a disproportionate number of applications relative to the number of R21 grants that can be funded (see Table 1). Thus, the cut-off for funding of R21 grant applications is more stringent than that for R01 applications for all investigators (Figure 5-7). Thirty percent of the grants funded had rankings beyond the 7th percentile.

In contrast to the case with the R01 funding patterns, success rates for R21 funding of applications from new and early stage investigators[3] are significantly lower than for established investigators (8% versus 14% success rates, respectively) (Table 1). The difference in success rates for R21 compared to R01 applications from new investigators is striking: 8% compared with 13%. This disparity results from the fact that R01, but not R21 applications, from new investigators are given preferential consideration.

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3 The NIH does not separate the categories, nor report the r21 grants in terms of experienced or new investigators. The NCI was able to apply the R01 rules to the R21 to extract, and generate the data that distinguishes the 2 groups in these graphs.