

# NCI Outstanding Investigator Award (R35) RFA concept

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# NCI R35 Outstanding Investigator Award (OIA): Goals

- Launched in 2015 as a PAR
- Provides long-term support for accomplished scientists who have made seminal contributions to cancer research
- Enables innovative studies in emerging research areas or extend previous discoveries in new directions in biomedical, behavioral, or clinical cancer research

## NCI Outstanding Investigator Award (OIA): Eligibility

- PI has outstanding cancer research productivity and has been PI on an eligible NCI grant award for the last 5 consecutive federal fiscal years
- Institution agrees to relinquish single PI/single project NCI awards to consolidate within the OIA
- Institution must demonstrate commitment to the PI (e.g. provide 20% salary support for the award's duration)

# NCI Outstanding Investigator Award (OIA): Criteria

- Successful OIA applicants should have:
  - Articulated a compelling vision of the future direction of their research.  
*Specific aims are not part of the application*
  - Track records of outstanding cancer research accomplishments and productivity
  - Seminal contributions that led to groundbreaking or paradigm-shifting concepts in cancer research
  - The potential to continue to be leaders in cancer research with significant impact and influence on cancer research
- Focus of review is on the investigator's scientific accomplishments and overall vision for future directions

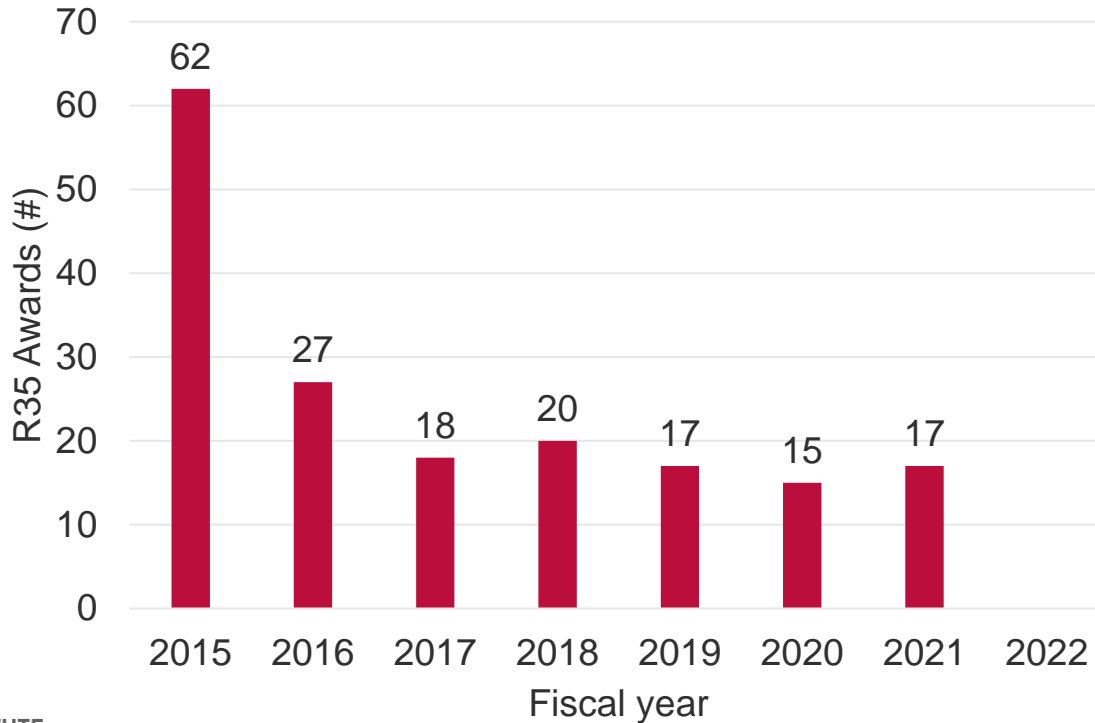
# NCI Outstanding Investigator Award (OIA): Requirements

- PI commitment of least 6 person months effort to the OIA
- PI is limited to 2 additional NCI grants
- PI is expected to provide expertise as a peer reviewer when asked

# NCI Outstanding Investigator Award (OIA): Awardees

Number of OIAs Funded: 176

Goal at steady state: 120-125



# NCI Outstanding Investigator Award (OIA): Lessons Learned 2015-2021

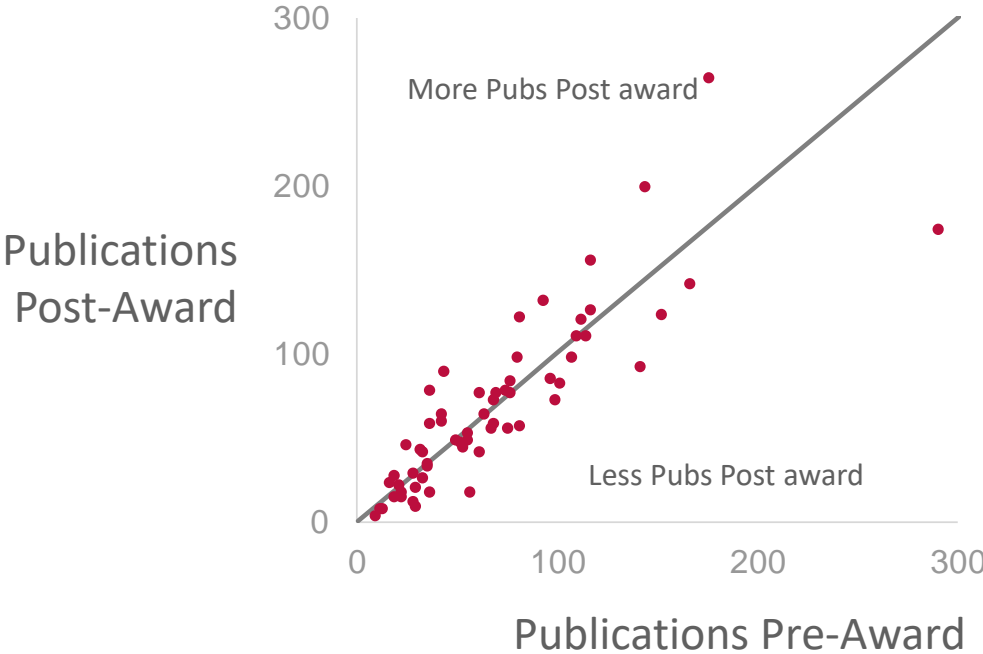
- Post-Award productivity
- Demographics
- Programmatic cost

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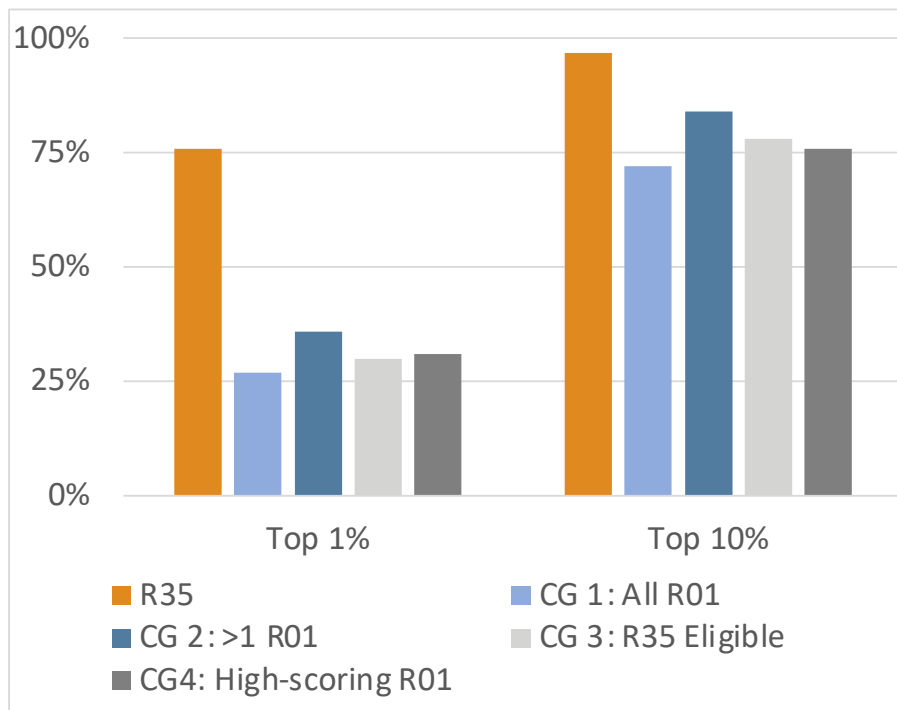
- ➔ • Post-Award productivity
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# Productivity is Maintained Following the OIA Award



# R35 Funded Publications are Highly Cited Relative to RO1's



- 75% of R35 projects had one or more top 1% publication
- 97% of R35 projects had one or more top 10% publication

# NCI Outstanding Investigator Award (OIA): Lessons Learned 2015-2021

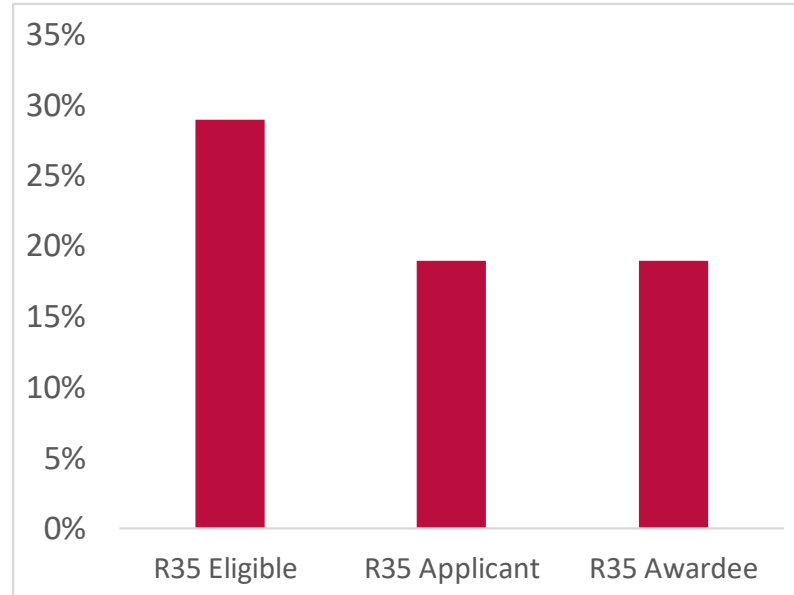
- Post-OIA productivity
  - OIA investigators continued to be productive, generating high-impact research
- Demographics
- Programmatic cost

# NCI Outstanding Investigator Award (OIA): Lessons Learned 2015-2021

- Post-OIA productivity
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# Demographics of the R35 Program

FY2015 – FY2021



- The gender breakdown of awardees reflects the applicant pool : 19% of applicants and awardees identify as female.
- 29% of eligible investigators are female.
- Diversity of the awardee pool is reflective of the applicant pool.
- Among eligible PI's within 10 years of their first award, 2% of females and 5% of males actually apply.


# Distribution of OIA Applications and Success Rate Across NCI Divisions

<u>Division</u>	<u>Applications</u>	<u>Funded</u>	<u>%</u>
<b>DCB</b>	<b>550</b>	<b>125</b>	<b>22</b>
<b>DCCPS</b>	<b>41</b>	<b>7</b>	<b>17</b>
<b>DCP</b>	<b>22</b>	<b>6</b>	<b>27</b>
<b>DCTD</b>	<b>228</b>	<b>37</b>	<b>16</b>

# NCI Outstanding Investigator Award (OIA): Lessons Learned 2015-2021

- Post-OIA productivity
  - OIA investigators continued to be productive, undertaking high-impact research
- Demographics
  - Out-reach is needed to:
    - Mid-career investigators, women, URMs
    - Prevention and population scientists
- Programmatic cost

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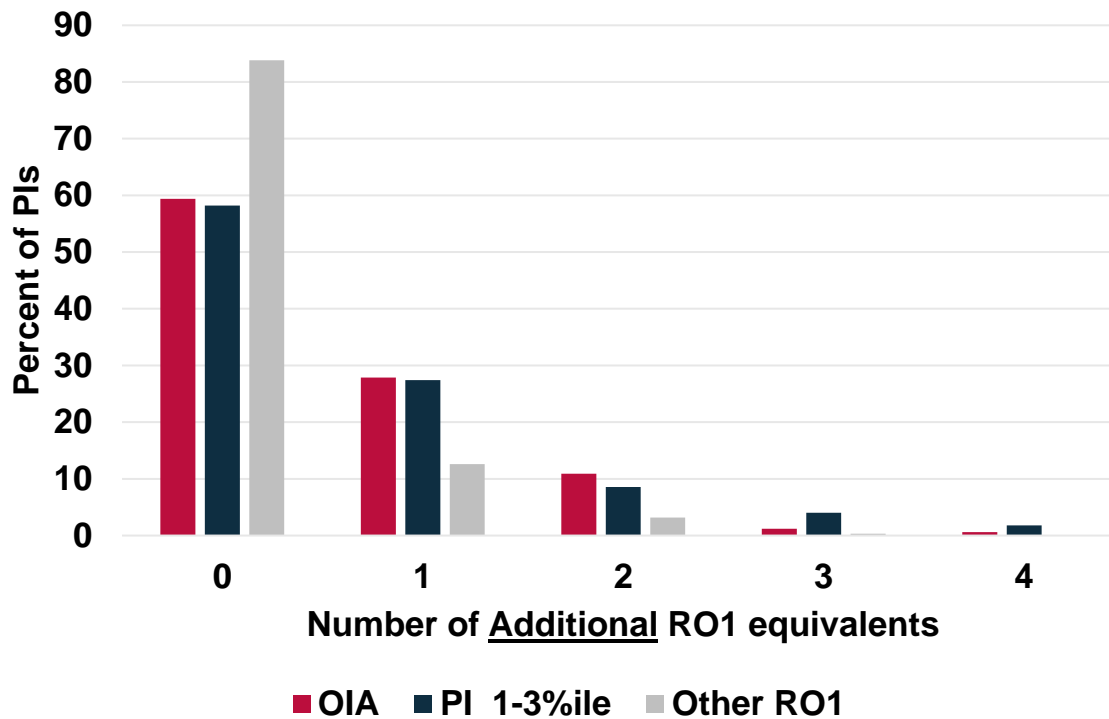
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# What is the Incremental Cost of the OIA Program?

- What is the incremental cost relative to an RO1?
  - Average cost of an NCI RO1 is \$521K TC
  - OIA budget is \$600K DC, resulting in an average of \$935K TC
  - To support 17 OIA awards each year, the incremental cost would be ~\$7M/year.
  - OIAs have to relinquish existing NCI awards

# The Majority OIA Investigators Have No Additional RO1 Equivalents



# NCI Outstanding Investigator Award (OIA): Lessons Learned 2015-2021

- Post-OIA productivity
  - OIA investigators continued to be productive, undertaking high-impact research
- Demographics
  - Out-reach is needed to:
    - Mid-career investigators, women, URMs to expand diversity.
    - Prevention and population scientists
- Programmatic cost
  - The incremental cost of the OIA program is ~\$6M/year.
  - Most OIA PI's have one or no RO1 equivalentents

# NCI Outstanding Investigator Award (OIA): Why an RFA?

- The original OIA issuance was intended to be a pilot program. There was no perceived need for an RFA.
- Among the lessons learned during the pilot was that an RFA is necessary:
  - 1) An RFA enables NCI to balance the portfolio, both with respect to new and competing awards and demographics. Neither of these is possible with an RFA.
  - 2) The RFA sets a budget limit which allows NCI to maintain a steady-state level of 120-125 awardees which the PAR does not.

# NCI Outstanding Investigator Award (OIA): Budget

The OIA (R35) supports Principal Investigators with a 7-year award and a budget of \$600K DC/year—roughly \$900K total cost per award. The intent is to maintain a steady-state level of OIA investigators at 120-125.

Requesting a single issuance with 3 annual receipts dates: Fall 2022, 2023, and 2024

Award Dates: July 2023, July 2024, July 2025

Anticipated # of Awards: 17-18 per year

Year One Set-Aside (Total Costs): \$17M per year

Cost for 7 year Project Period (Total Costs): \$119M

# NCI Outstanding Investigator Award (OIA): Evaluation Criteria for RFA

- The OIA will be evaluated in response to the following broad goals:
  - Important contributions to the field (e.g., outstanding research quality; landmark publications, patents, description of progress toward development of new approaches, models, etc.
  - Developing and/or using experimental approaches critical to the progress of his/her area of research.

## Questions?



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