

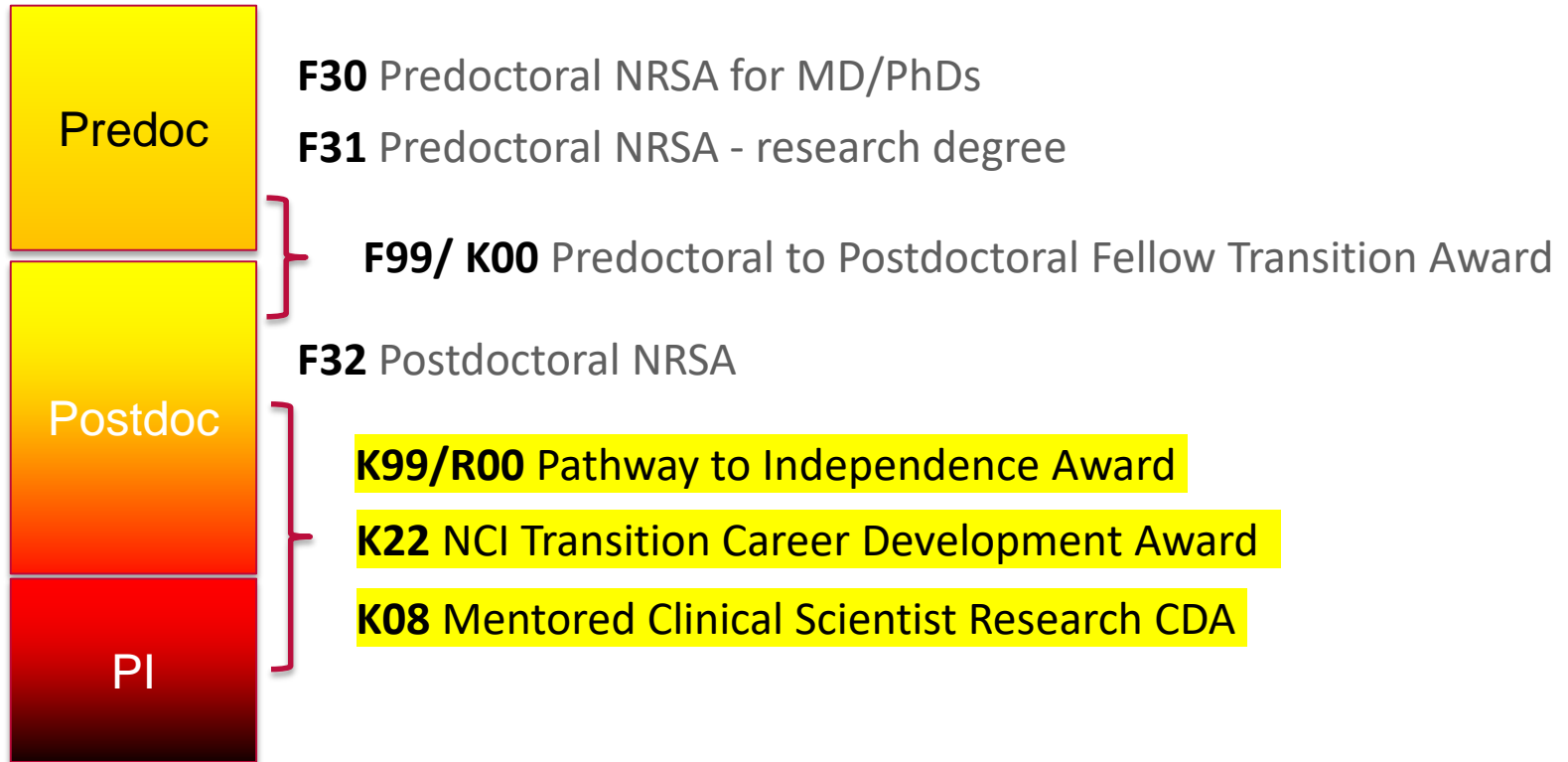
Tips for Preparing NCI Career Development (K) Award Applications

Mentored Clinical Scientist Research Career Development Award (K08)
The NCI Transition Career Development Award (K22)
The Pathway to Independence Award (K99/R00)

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Research Career Development Awards



The Pathway to Independence Award (K99/R00) PA-19-129/ PA-19-130

- **Objective:** To help outstanding postdoctoral researchers complete needed, mentored career development and transition in a timely manner to independent, tenure-track or equivalent faculty positions.
- **Eligibility:**
 - U.S. citizens and non-U.S. citizens (@domestic institutions)
 - Less than **4 years** of postdoctoral research training
 - MDs: Time spent in clinical training is not counted towards K99/R00 eligibility
 - Cannot have held an independent faculty or tenure-track position
- **Research:** all areas of cancer research

NCI Pathway to Independence Award for Outstanding Early Stage Postdoctoral Researchers (K99/R00) RFA-CA-20-.../ RFA-CA-20-...

Eligibility: 0-2 years postdoc. training

Scientific Areas:

- Data Science
- Cancer Control Science
- Other Sciences

The Pathway to Independence Award

- **Mentored Phase (K99) (1 - 2 years):**

Supports postdoctoral research training & career development
Salary: up to \$100,000/year; Research Support: \$30,000/year

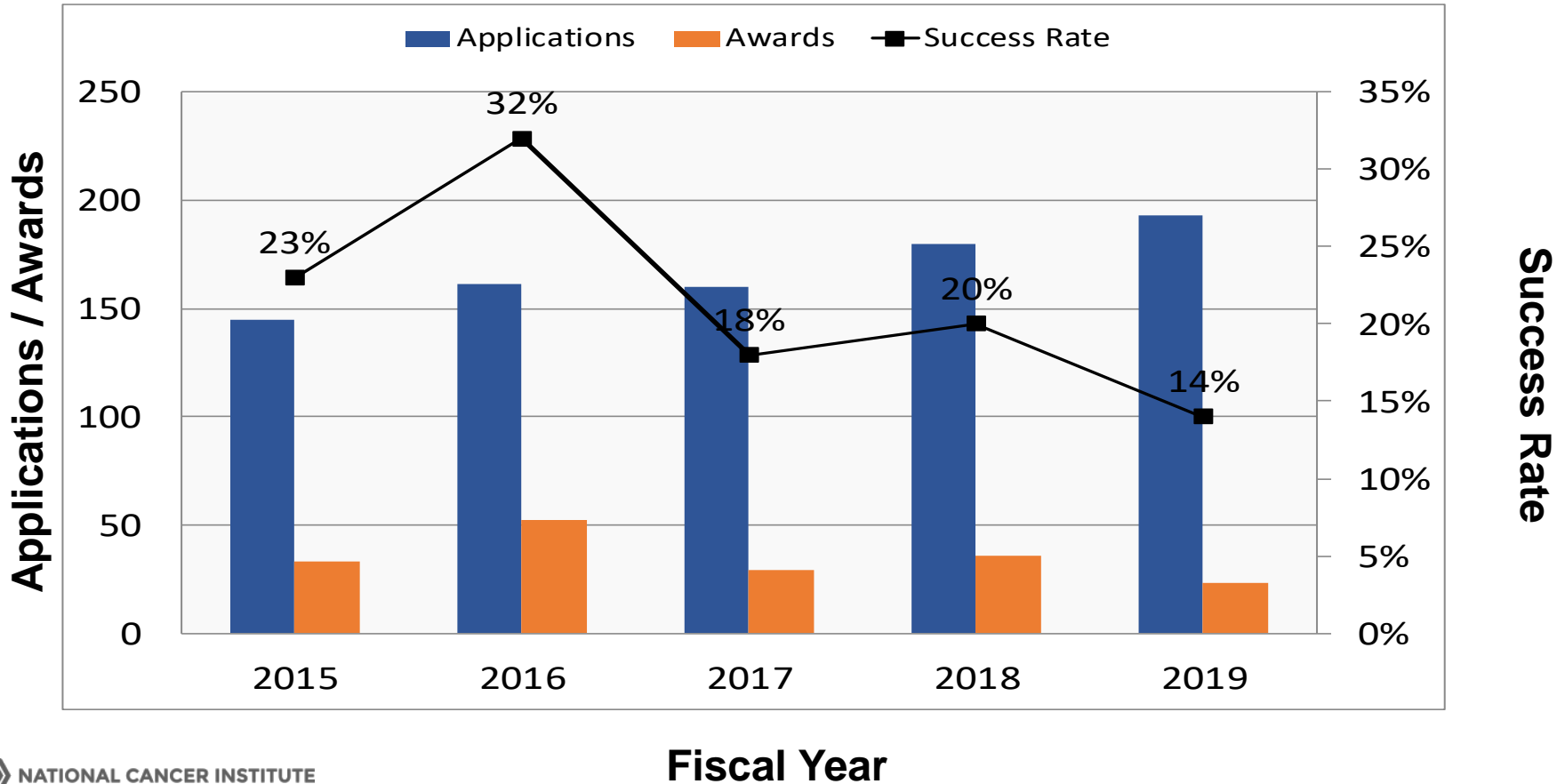
Tenure-track Assistant Professor Position (or Equivalent)



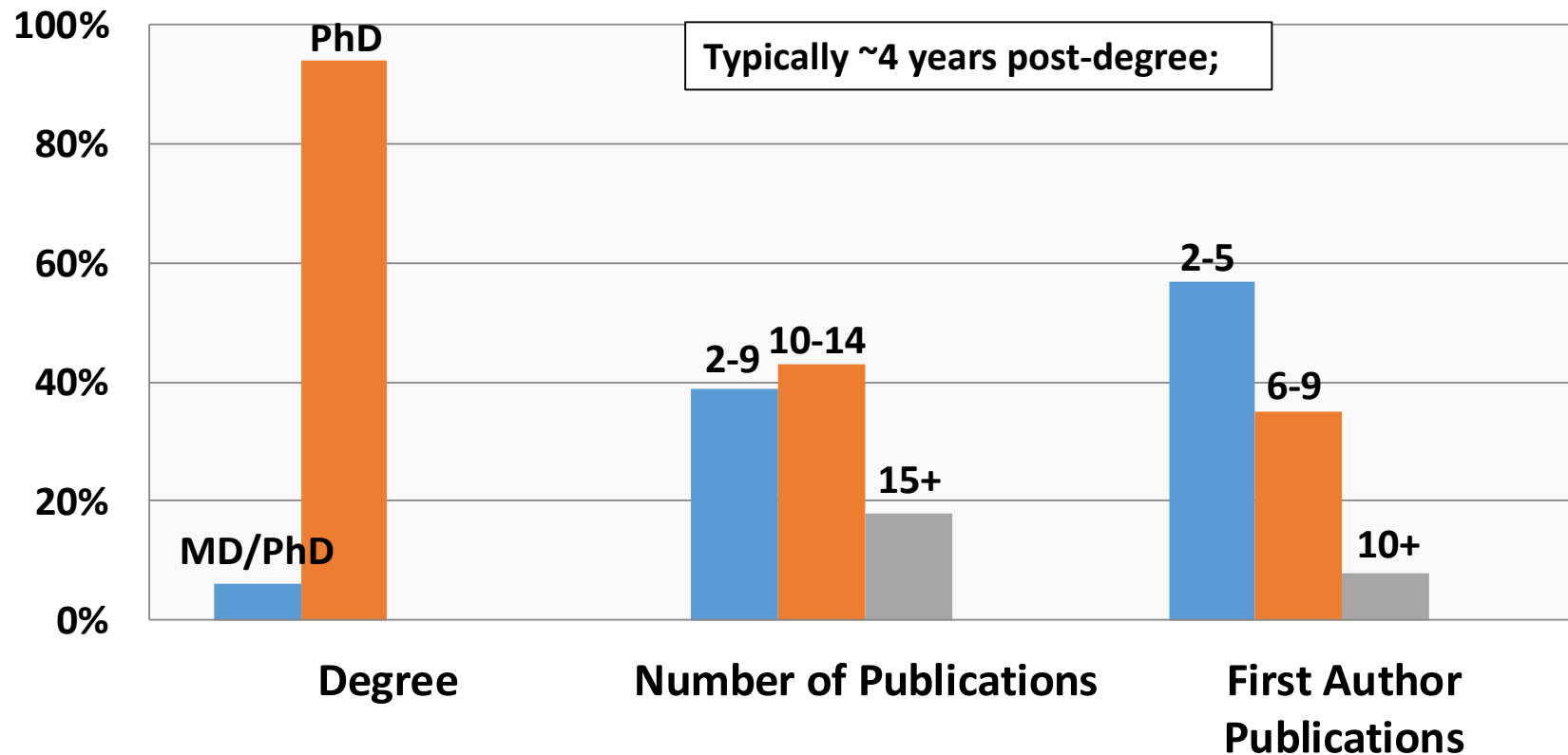
- **Independent Scientist Phase (R00) (up to 3 years):**

Supports independent research project. Allowable Costs: Salary, fringe benefits, research support: \$249K/ year (total cost)

K99: Applications, Awards and Success Rates



Parent K99 Awardee Profiles



The NCI Transition Career Development Award (K22) PAR-18-467

- **Objective:** facilitates the transition of investigators in mentored, non-independent cancer research positions to independent faculty cancer research positions. The K22 provides protected time for the initial 3 years of the first independent tenure-track faculty position.
- **Eligibility:**
 - U.S. citizens and Permanent Residents (@domestic institutions)
 - **2-8 years** of postdoctoral research training
 - Cannot have held an independent faculty or tenure-track position
- **Research:** all areas of cancer research

Path to K22 Award

Postdoc/ Clinical
Fellow

K22 Application



Letter of Intent
To Commit Funds

Review

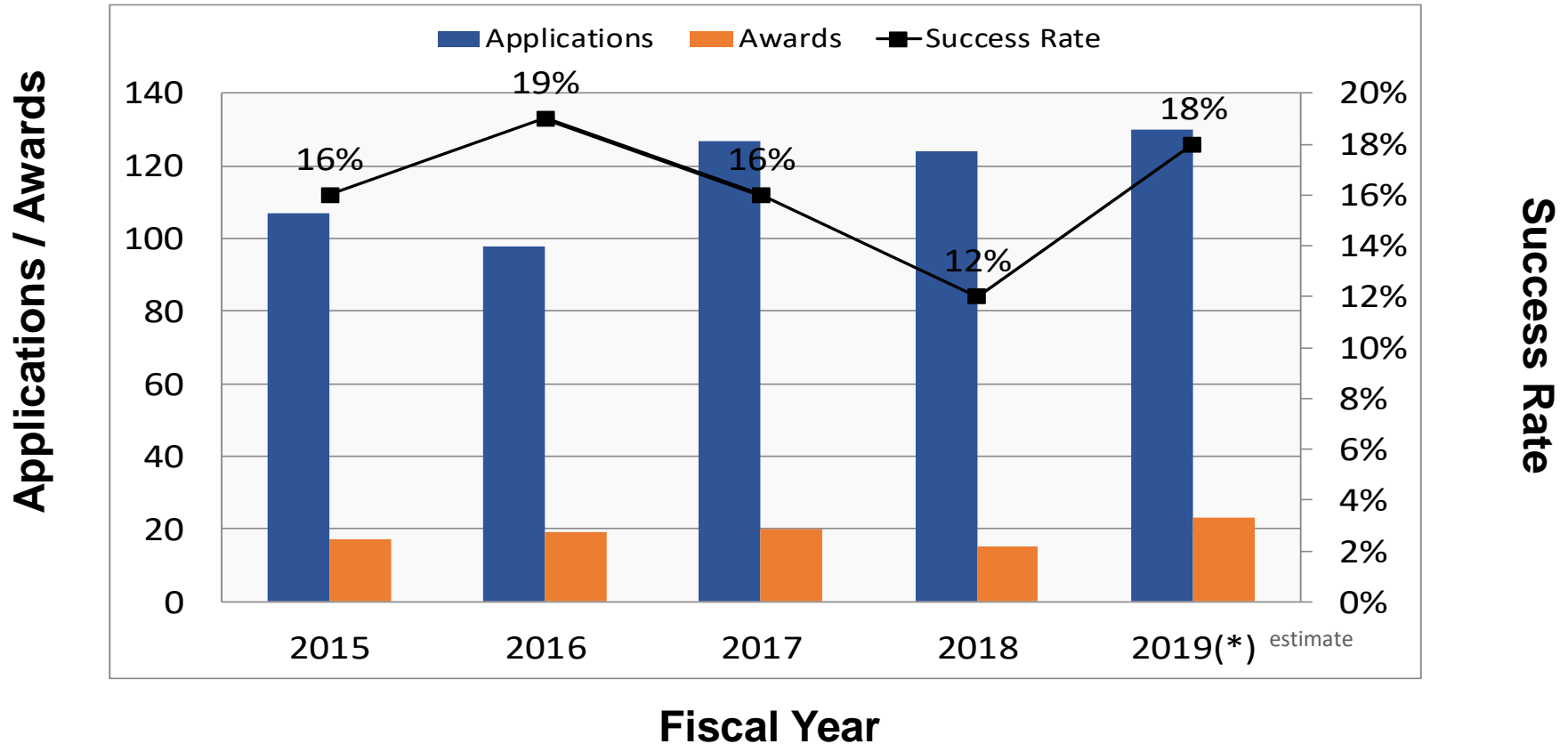


12 months

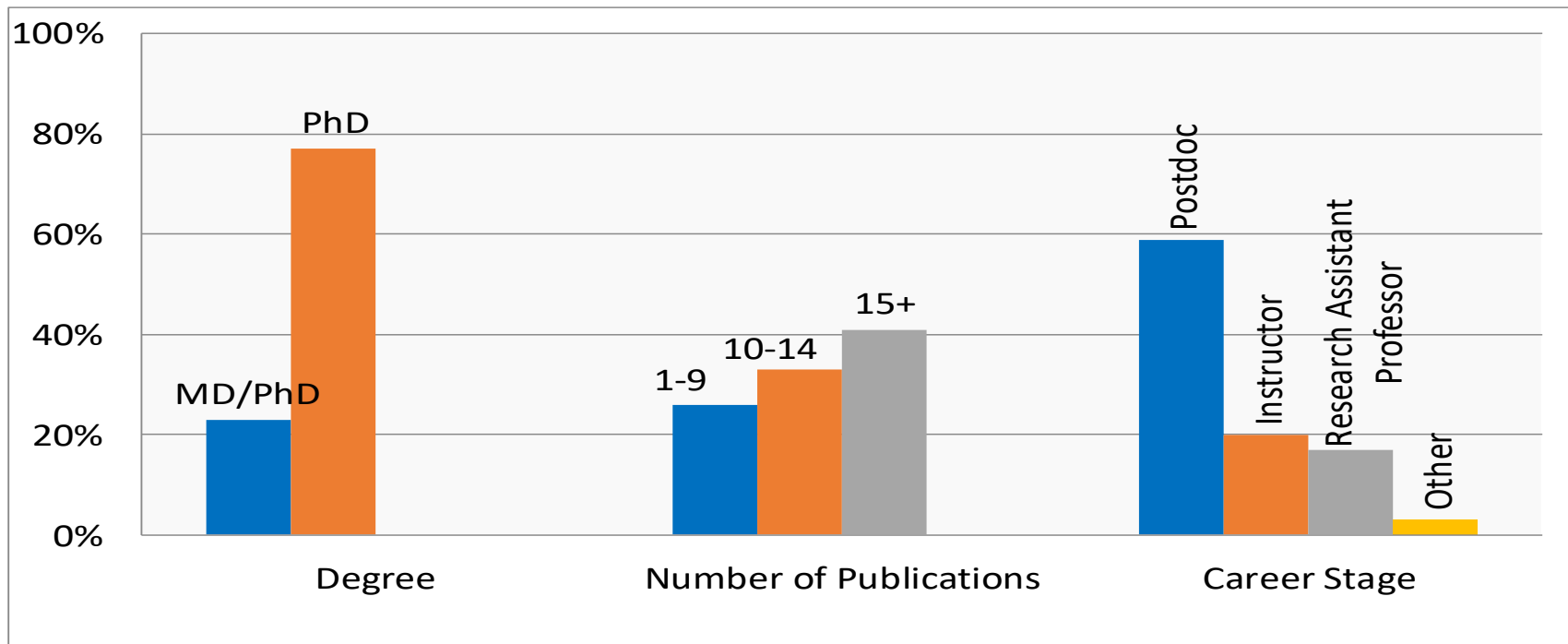
Tenure-track
Assistant Professor

K22 Award

K22: Applications, Awards and Success Rates



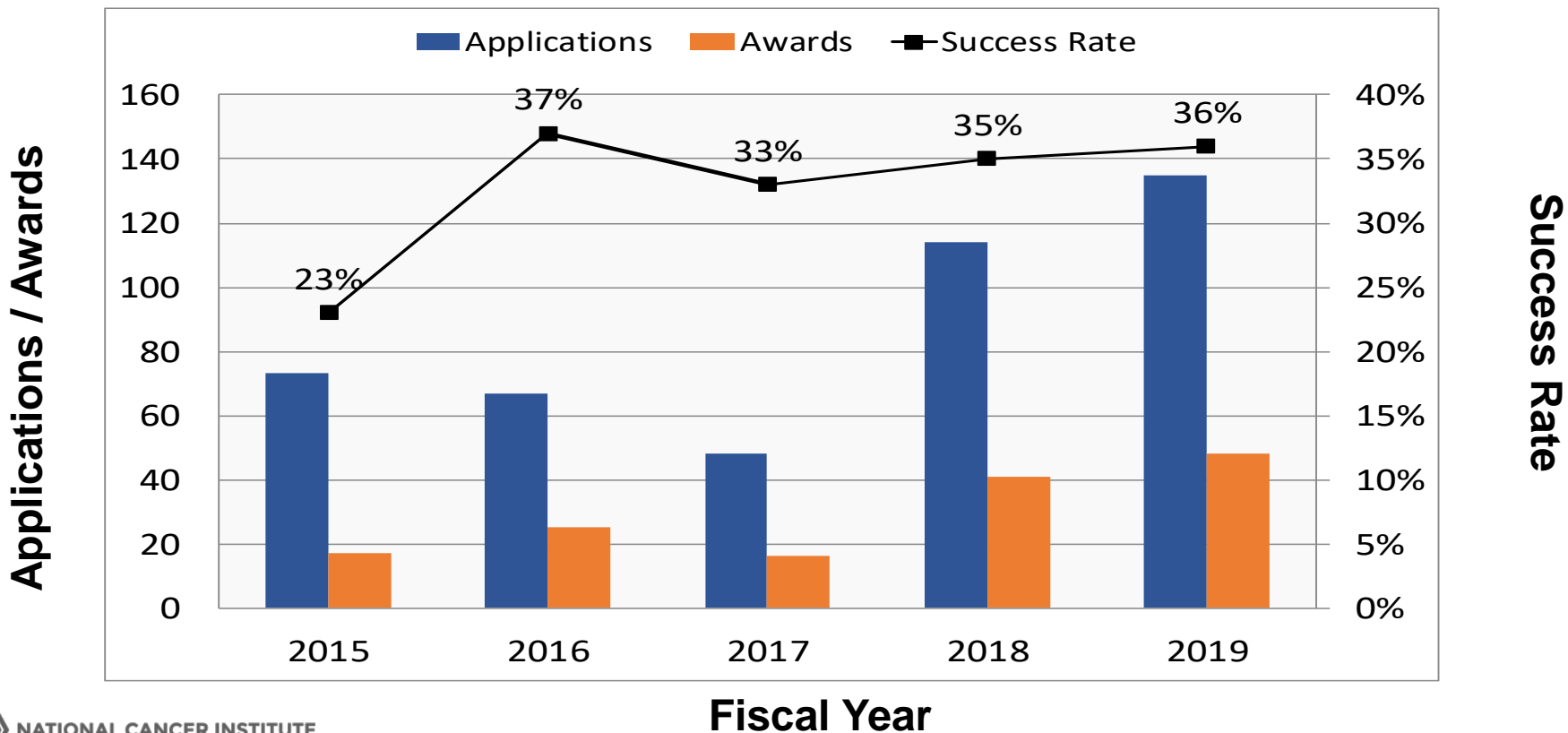
K22 Awardee Profile



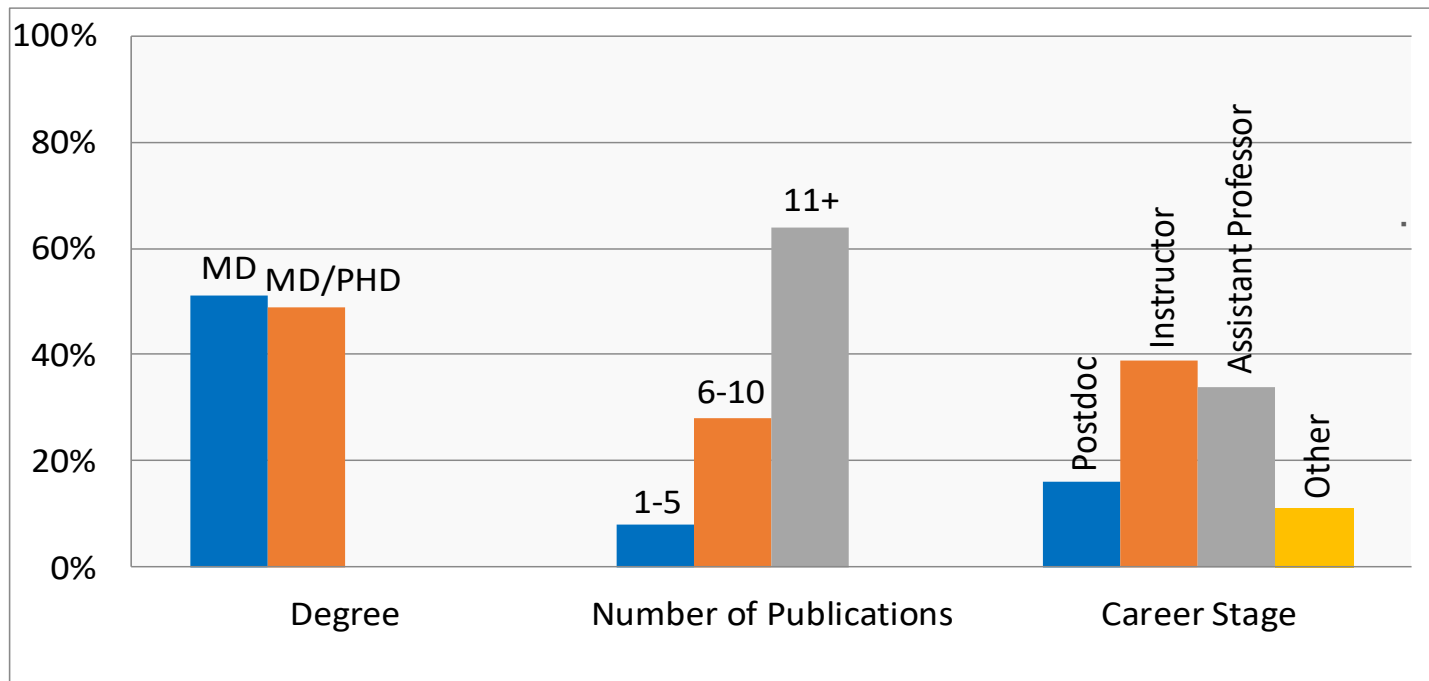
Mentored Clinical Scientist Research CDA (K08) PA-19-116/ PA-19-117

- **Objective:** Provides support and “protected time” to non-tenured clinician scientists at the early career stage for an intensive, mentored research career development in basic, translational, and/or patient-oriented cancer-focused research .
- **Eligibility:**
 - U.S. citizens and Permanent Residents
 - NCI requires the candidate to have an **active clinical license** to practice in the United States
 - 75% effort required for all specialties, including urologic surgeons
 - NCI: salary base up to \$189,600 + fringe benefits and \$50,000 in research support

K08: Applications, Awards and Success Rates



K08 Awardee Profile



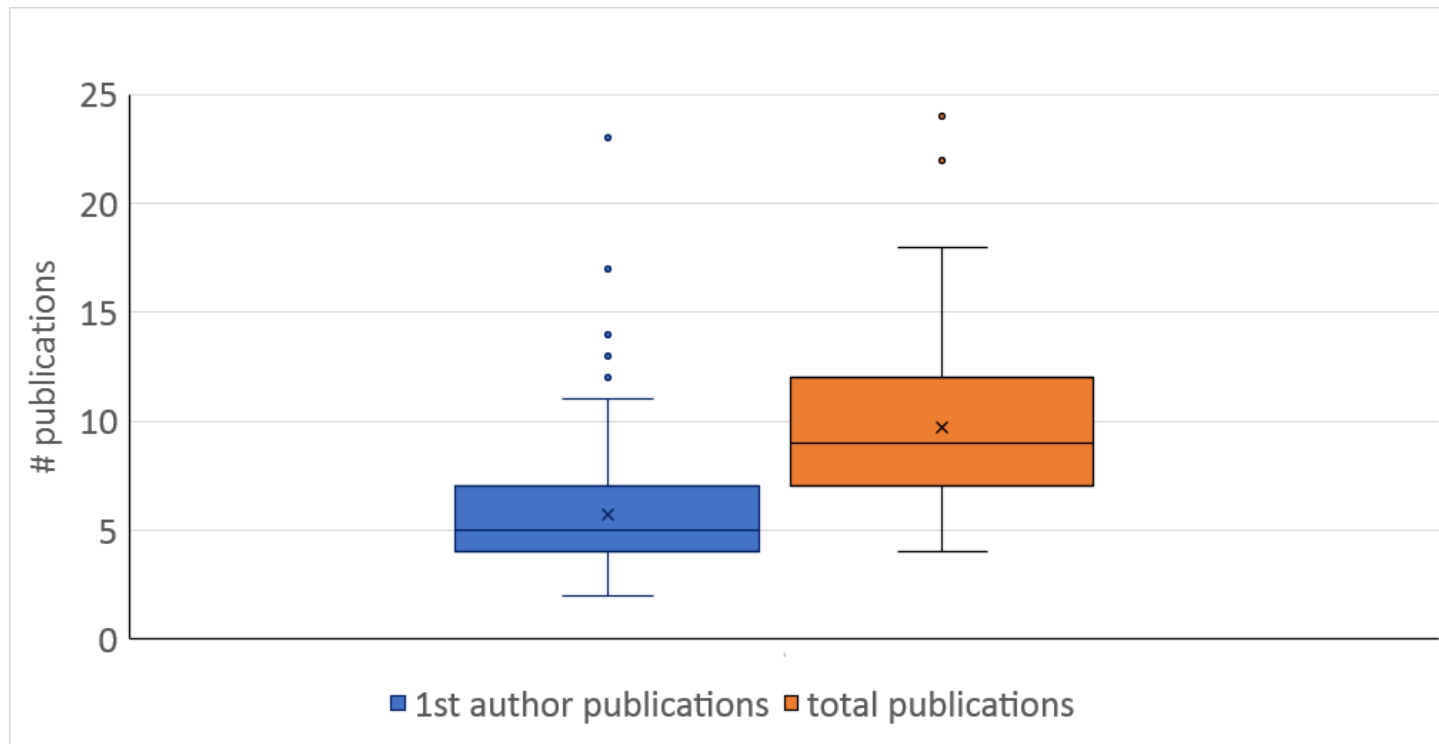
Application sections and page limits

| | |
|--|--|
| <ul style="list-style-type: none">▪ Candidate's Background▪ Career Goals and Objectives▪ Plan for Career Development▪ Research Strategy | <ul style="list-style-type: none">▪ 12 pages |
| <ul style="list-style-type: none">▪ Plans and Statements of Mentor and Co-mentor(s) | <ul style="list-style-type: none">▪ 6 pages |
| <ul style="list-style-type: none">▪ Letters of Support | <ul style="list-style-type: none">▪ 6 pages |
| <ul style="list-style-type: none">▪ Environment & Institutional Commitment | <ul style="list-style-type: none">▪ 1 & 1 page |
| <ul style="list-style-type: none">▪ Biosketch | <ul style="list-style-type: none">▪ 5 pages |

Candidate's Background/ Biosketch

- Convince reviewers that you have:
 - appropriate research qualifications (training/ experience)
 - potential for independence (collaborations, teaching, mentoring)
 - potential to make important contributions to the field

K99 Awardee Productivity



Career Goals and Objectives

- long-term research and career objectives
- logical progression from the prior research and training experiences to the K-award
- justify the need for additional training
- plan how to differentiate research program from that of your mentor and advance to research independence

Plan for Career Development

- Research training (skills)
- Professional development (lab management, ...)
- Impact of proposed training (independence)
- Be specific: Include workshops, conferences, ...
- Evaluation plan (timeline, milestones)

- Recommendation: identify advisory committee (benchmarks)

Research Strategy

- **Innovation**
- **Significance**
- **Research Plan**
 - rationale and preliminary data
 - robust and unbiased approach – plans for data analysis, statistical procedures, reproducibility
 - address biological variables (sex, age)

Research Plan (what are reviewers looking for?)

- Innovative, hypothesis-driven research
- Potential to significantly advance the field
- Good foundation to establish independence → long-term viability
- Address pitfalls and alternative approaches
- Ensure that the aims are not interdependent
- Ensure that your project is not overly ambitious

Plans and Statements of Mentor and Co-mentor(s)

(K08 and K99/R00; the K22 is non-mentored)

- Mentor(s): Strong mentoring and funding track record, highly qualified
- Mentoring/ training plan that addresses the candidate's needs
- K99/R00: transitioning plan

Tips for mentors

- Identify co-mentor(s)
- Co-mentor(s) should have a clearly defined role in the application
- Develop a training plan/ CDP that is tailored to the needs of the applicant/ candidate.
- Be actively involved in the grant preparation process
grantsmanship issues = poor mentoring
- Avoid scientific overlap + no text duplication from R01

What Makes a Good K-Grant Application?

- Great ideas and solid, well-considered rationale
- Proposing to test hypotheses (rather than to prove them)
- Demonstration of feasibility
- Publications
- Strong Mentors and Collaborators
- Meaningful Mentoring Plan

Common Mistakes/ Issues

- Aims underdeveloped – not thought through
- Lack of feasibility – lack of preliminary data
- Outdated approach
- Lack of expertise
- Too focused - or too broad/ ambitious
- Grantsmanship errors
- Too few publications as first author
- Publications not related to the application

Take Home Messages

- Don't lose sight of the big picture
(Why you love the science you do and your goal to become an independent scientist)
- Build your team wisely - mentor(s) and collaborator(s)
- Plan ahead
- Don't be afraid to ask questions or ask for help
- Publish

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