

The NCI Pathway to Independence Award (K99/R00)

BSA reviewers:

Jennifer Grandis, MD UCSF

Sylvia K. Plevritis, PhD Stanford

Trey Ideker, PhD UCSD

Michael Schmidt, PhD
Center for Cancer Training/ NCI/ NIH

New PAR Concept
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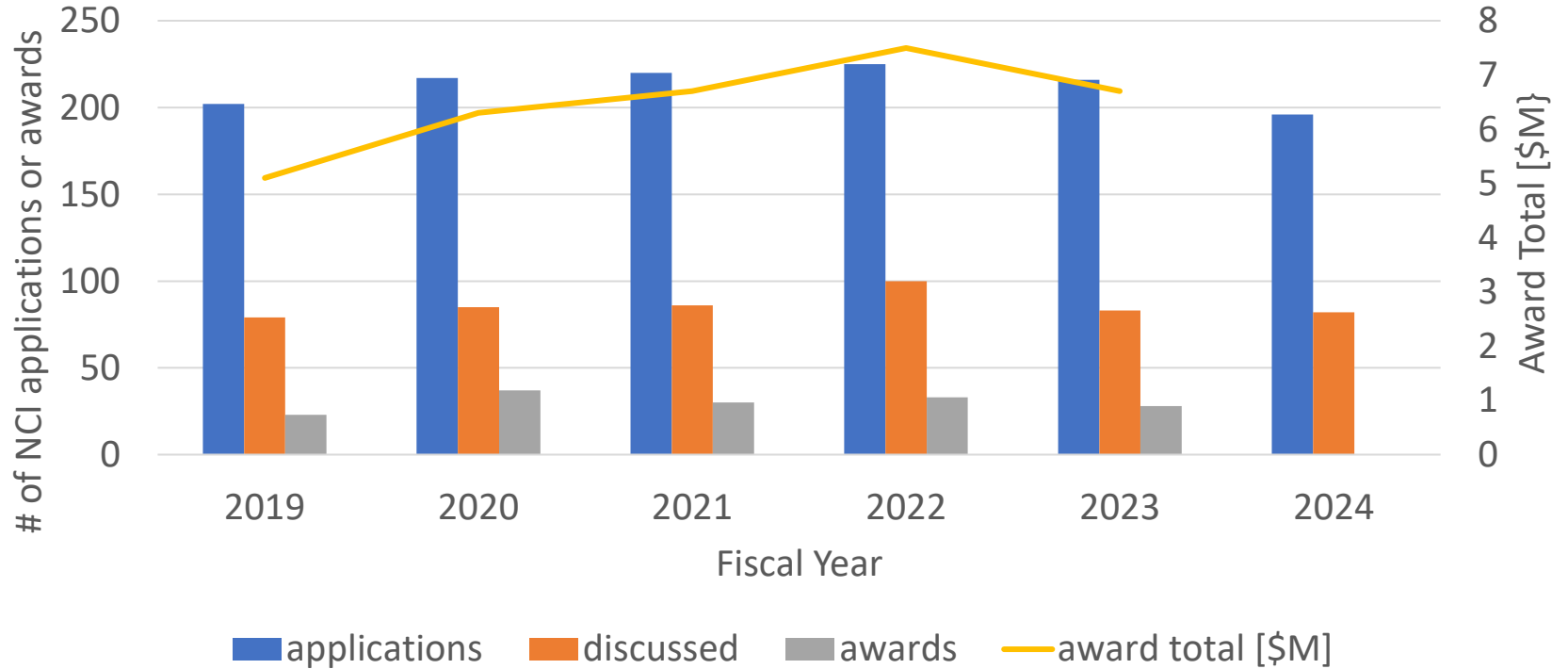
Agenda

- 1. *K99/R00 - overview***
- 2. *K99/R00 - evaluation***
- 3. *NCI K99/R00 PAR***

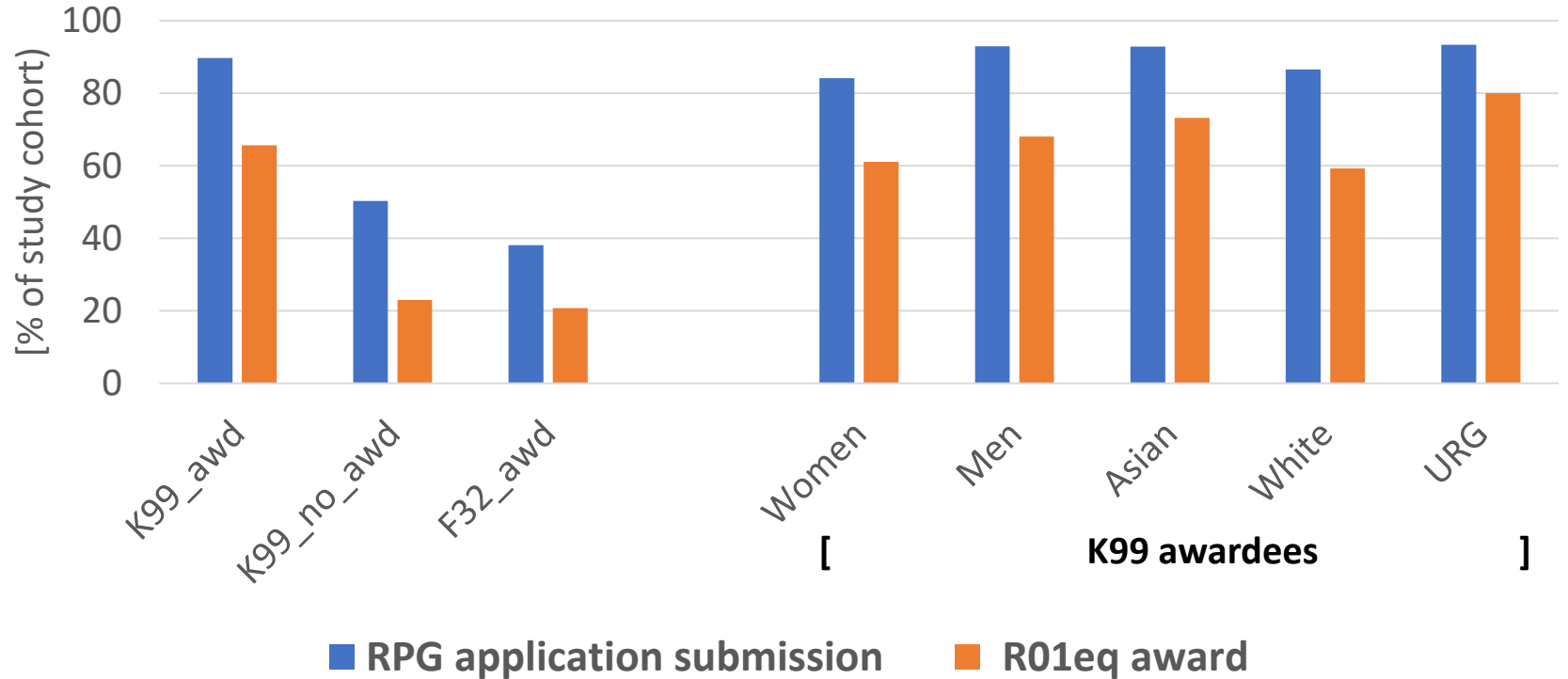
The Pathway to Independence Award (NIH K99/R00)

- **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

NIH parent K99/R00 NOFOs



Transition to independence (RPG submission) and securing R01eq support



Survey/ Interview

- 95% of K99 awardees indicated that the award helped them compete for a position as an independent researcher
- “pivotal in helping secure interviews and offers from (their) top choice institutions”
- ability to get their lab started and hire postdocs

Evaluation of the National Cancer Institute (NCI) Pathway to Independence Award (K99/R00) Program. Michael Schmidt, Corinne Boulanger-Espeut, Grace Liou, Nan Ma, Sasha Torres, Susan Cersosimo, Oliver Bogler, and Nastaran Zahir. *Journal of Cancer Education*. 10.1007/s13187-024-02420-1.

K99/R00 eligibility limit: 4 years

Postdoctoral scholars' concerns:

- The 4-year limit discourages high-impact research projects (especially if there is high risk involved) and biases the K99/R00 for candidates coming from well-resourced laboratories.
- The 4 -year K99/R00 cut-off penalizes postdoctoral researchers who had:
 - High impact publication (require a long time)
 - An unconventional pathway (i.e., changed research fields, changed labs, proposed research with work-intensive model systems) or who trained in a non-supportive environment; had health issues, family issues, visa issues etc.
- Many K99 applicants are not eligible to resubmit.

NIH Advisory Committee to the Director, Working Group on Re-Envisioning NIH-Supported Post-doctoral Training: RFI, listening session

	NCI K99/R00 PAR (proposed)	NIH parent K99/R00 PA	NCI K22 PAR (CCT)
Eligibility			
Postdoc experience	Up to 6 years	Up to 4 years	Up to 8 years
Citizen requirements	none	none	U.S. citizen or permanent resident
Award duration (max.)	5 years	5 years	3 years
Mentored support	2 years	2 years	none
Independent support	3 years	3 years	3 years
# applications (average, past 5 years)	300 (estimated)	215	116
Total costs/ year average, past 5 years	\$9.9M (38 awards; estimated)	\$6.4M	\$8.1M

The total anticipated cost of the R00 phase, based on a 90% estimated R00 activation rate, is $38 \times 0.9 \times 3 \text{ years} \times \$249,000 = \$25.5\text{M}$ (start: FY28).

Potential downsides/ unintended consequences

- Review bias for more experienced applicants (who have more publications, stronger training experience,..).
- >> modify NOFO review criteria to encourage reviewers to evaluate applicants in the context of their career stage
- >> request that reviewers focus on whether the applicant is ready for transition to independence, regardless of the number of years post receiving their doctorate
- An eligibility extension to 6 years might not be sufficient.
- >> NCI will monitor the NCI K99/R00 applicant pool and propose further extensions if necessary. In addition, NCI will continue to be flexible e.g. by providing eligibility extensions for childbirth, critical life events and similar reasons
- Define allowable applicants' position titles in the NOFO – more flexibility might be required.
- >> NCI allows K99/R00 applicants from research associates, staff scientists and instructors (non-independent, mentored positions)

Summary

- Our recent paper shows that the K99/R00 facilitates the successful transition of postdoctoral scholars to research independence in the academic setting.
- The 4-year eligibility limit is a major hurdle for some applicants.
- We propose an NCI K99/R00 PAR that will expand the eligibility window for NCI K99/R00 applicants from 4 years to 6 years of postdoctoral research experience increasing inclusivity of the award.
- We will sunset the CCT K22 program, folding its budget into the K99/R00 PAR, and eliminating a mechanism with an 8-year eligibility window, citizenship restrictions, and which is difficult to manage from a budgetary standpoint.

Thank You!



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