NCI Training Awards for Trainees

Ming Lei
Cancer Training Branch, NCI

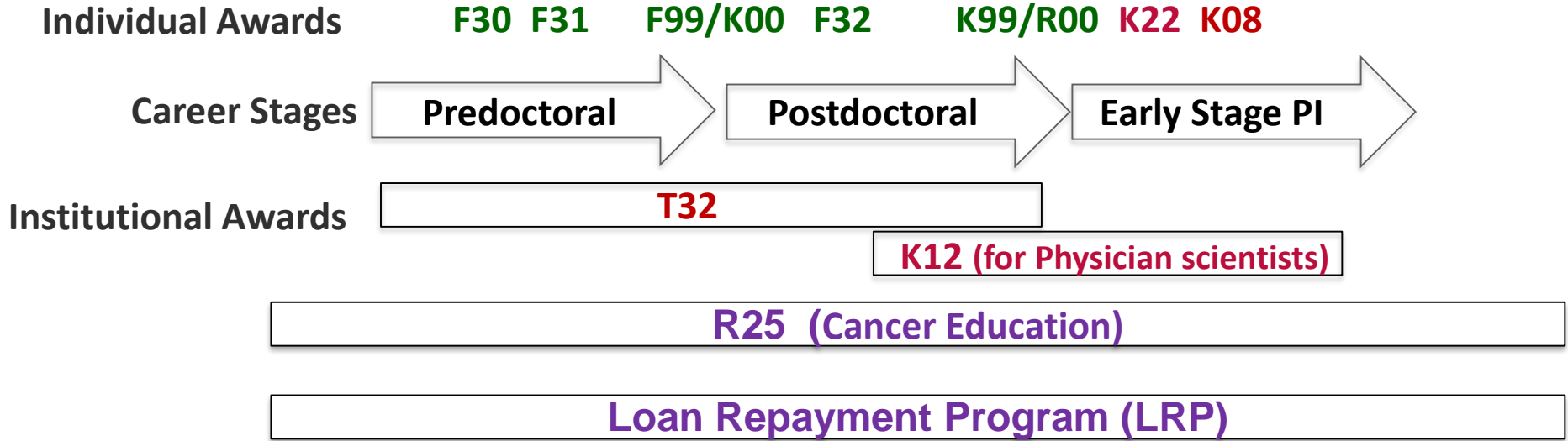**NGW '18**
01-24-2018

Question: Who Will Have the Biggest Impact to Your Research Career?

Answer:

A. Colleagues/Collaborators

B. Department Chair/Dean

C. R01 Program Director(s)

D. **Students/Trainees**

Support for Training at Different Career Stages

Individual Awards F30 F31   F99/K00 F32   K99/R00 K22 K08

Career Stages Predoctoral → Postdoctoral → Early Stage PI

Institutional Awards T32

K12 (for Physician scientists)

R25 (Cancer Education)

Loan Repayment Program (LRP)

Funding Rates **Characteristics of Awardees** **Suggestions**
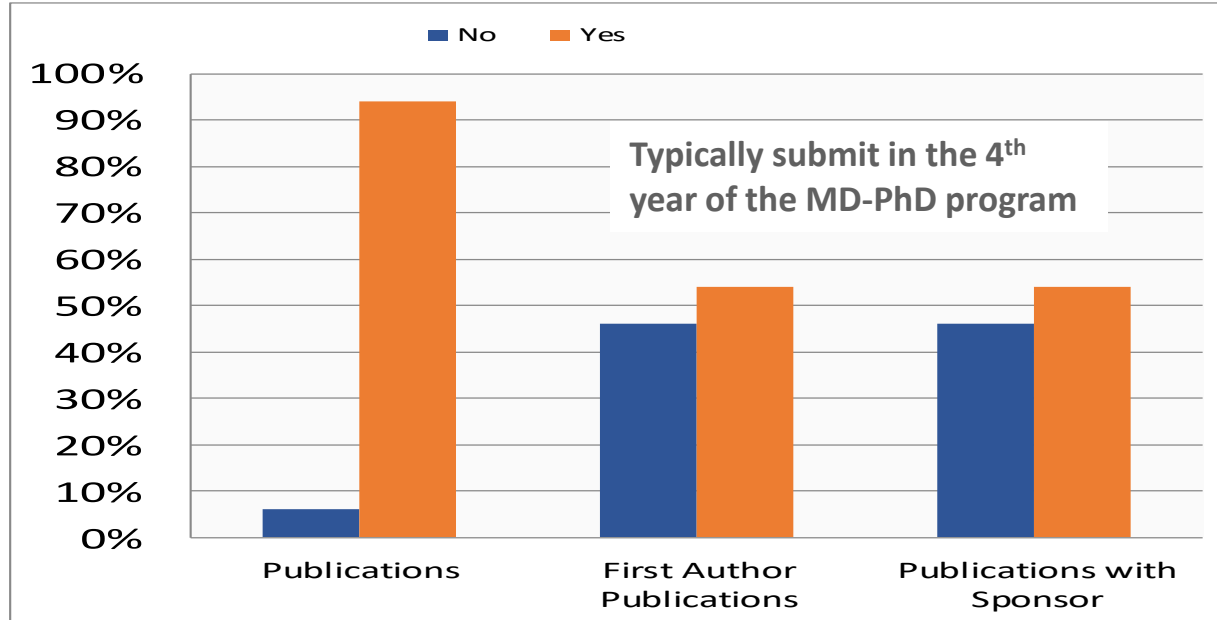
Training Mechanisms Are Supported with Healthy Funding Rates

Mechs	Candidate	Training Objective	Success Rate
F30	MD/PhD Students	Dissertation Research	39% (40%)
F31	PhD Students	Dissertation Research	24% (26%)
F99/K00	Nominated PhD Students	Dissertation Research/ Pursuing Career as PI*	30% (38%)
F32	1-3 yr Postdocs	Advanced Training	25% (19%)
K99/R00	3-4 yr Postdocs	Transition to PI	26% (25%)

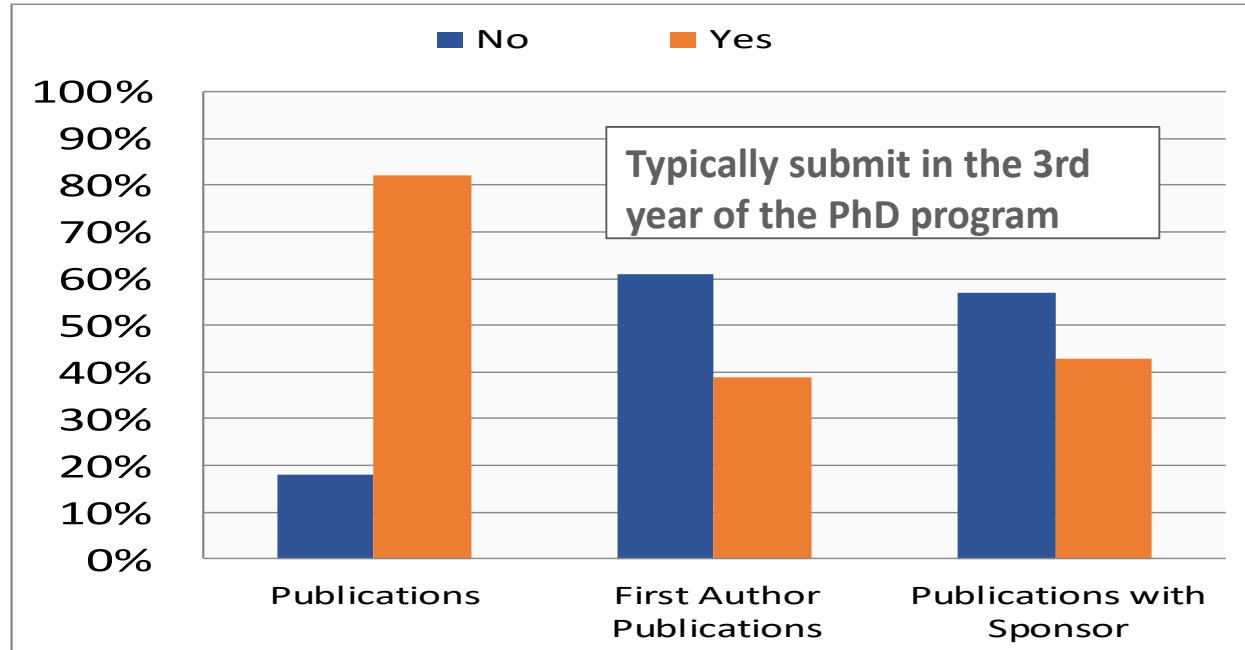# F30 Pre-doctoral Fellow Characteristics

- Enrolled in dual degree (e.g., MD/PhD) programs
- US Citizens or Permanent Residents

Characteristics

F31 Pre-doctoral Fellow Characteristics

- Enrolled in research doctoral degree (e.g., PhD) programs
- US Citizens or Permanent Residents

Typically submit in the 3rd year of the PhD program

Legend: No (blue), Yes (orange)

X-axis categories: Publications, First Author Publications, Publications with Sponsor

Characteristics

F99/K00 Transition Award for Graduate Students Interested in Independent Research Careers

- **Dual phase funding: support for up to 2 years for 3rd/4th-year students, and 4 years for postdoctoral training**

3rd/4th yr grad students	F99 Predoc	K00 Postdoc	K99 Postdoc

- **Institutional Nomination of Applicants: one nomination per institution each year to strengthen institutional input in the selection process**

- **Open to the best international students, removing one NRSA restriction considered outdated by the research community**

- **The K00 fellows, from the first day as postdocs, will be employees with family and retirement benefits etc.**

F99/K00 Year 1-2 FY16&FY17 Portfolio Analysis

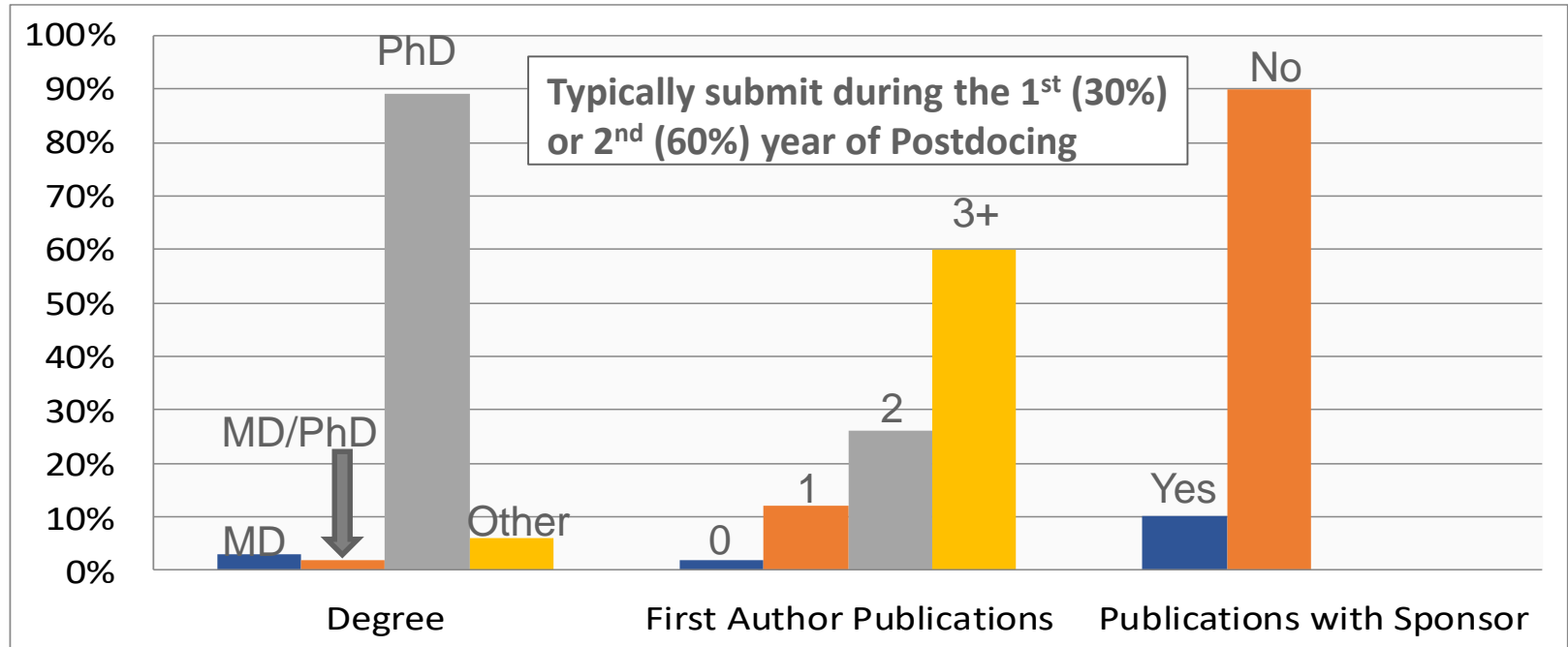|	Applications	Awards	Success Rate
Total	166	63	38%
International Students	52	16	31%
F31 Awardees	14	10	71%
F31 Applicants	33	16	48%

F32 Post-doctoral Fellow Characteristics

- US Citizens or Permanent Residents

K99/R00: Pathway to Independence Award
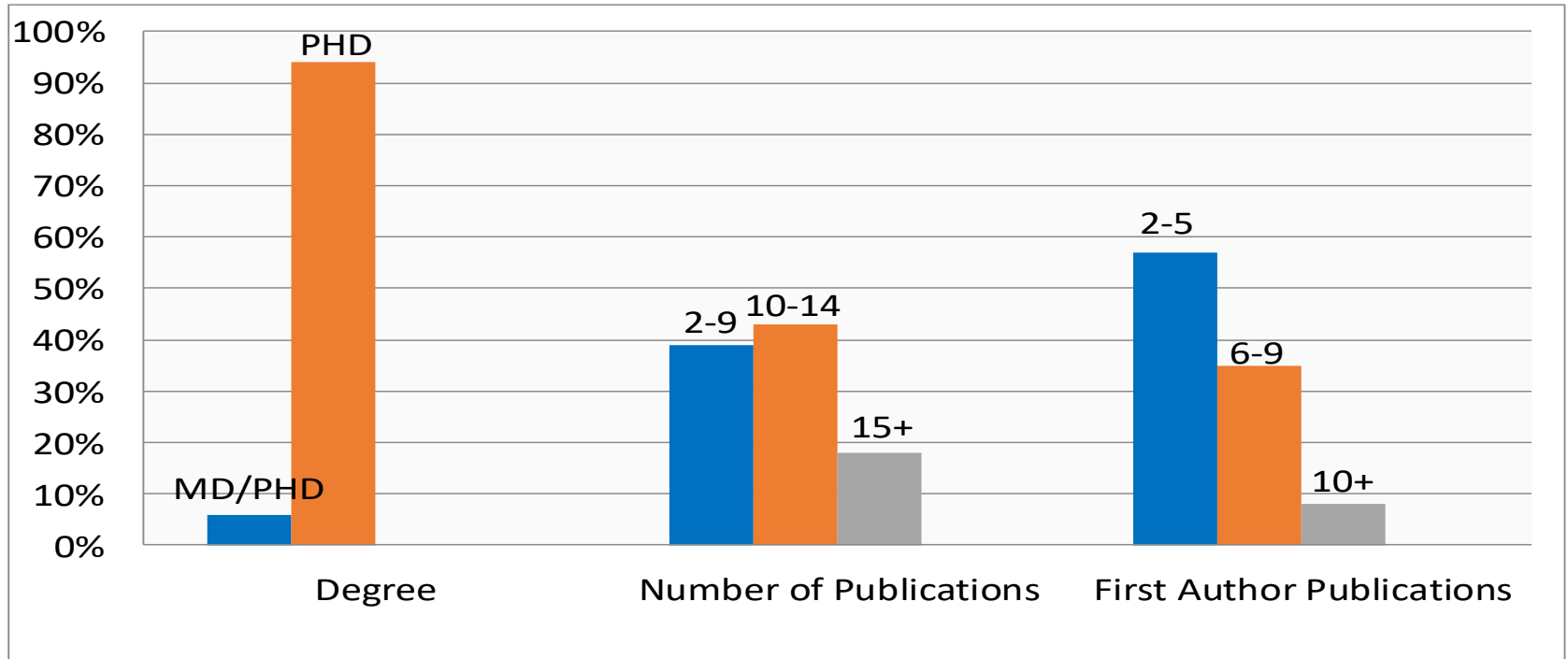
Objective: To assist postdoctoral investigators in transitioning into independent research positions

Candidate: Postdoctoral or clinical fellows with no more than 4 yrs postdoctoral research experience
No citizenship requirement

Award: K99 phase (2 yrs): Up to $100K plus fringe benefit
Up to $30K research support

R00 phase (3 yrs): $249K/yr
≥75% Professional effort (protected time)

K99 Fellow Characteristics

Major Components in An Application: R01 vs. K(F)

Section of Application	Page Limits
Specific Aims	1
Research Strategy (Significance; Innovation; Approach)	12
Biographical Sketch	5

Section of Application	Page Limits
Specific Aims	1
Candidate Information and Goals for Career Development and Research Strategy	12
Training in the Responsible Conduct of Research	1
Plans and Statements of Mentor and Co-mentor(s)	6
Letters of Support from Collaborators, Contributors, and Consultants	6
Description of Institutional Environment	1
Institutional Commitment to Candidate's Research Career Development	1
Biographical Sketch	5

Take Home Messages

To the Mentors/Sponsors:

- Your Students/Trainees are the most important people to your career
- Training awards enjoy healthy success rates. Encourage your students to apply
- Develop customized mentoring plans for the students
- Encourage the students to develop/write their own research plan

To the Students/Applicants:

- Allocate time to prepare the F- and K- specific sections
- Engage the mentors, collaborators, and institutional leaders early for the application
- Develop a research plan feasible for one person to carry out in 3-5 yrs (use "I" instead of "We" whenever appropriate)
- Allocate time for mentor/peer to provide real feedback to the application

Places to Go for Detailed Information

NCI CTB home page:

http://www.cancer.gov/grants-training/training/funding

NIH grant policy:

http://grants.nih.gov/grants/policy/nihgps/HTML5/section_11/11.3_institutional_research_training_grants.htm

NRSA F&Q: http://grants.nih.gov/training/faq_training.htm#1259