An Introduction to NIH Career Development Awards

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Working Group On Student and Trainee Research

New members welcome!

Conflict of Interest

- Nothing to disclose

Outline

- Introduction

- Types of Career Development Awards (CDAs)

- Pathway to Independence Award (K99/R00)

- Summary

What are Career Development Awards?

- Career Development Awards (CDAs)
  - Program established in 1961
  - Aims to enable investigators with demonstrated research potential to further develop research careers
  - Generally provide up to 5 years of support

- Given the "K" designation

- Mentored and Non-mentored award types are available

Key Differences in CDAs vs Traditional R Grants

- Require identification of a mentor (for mentored awards)
  - Should be recognized as accomplished investigator in proposed research area, have track record of successfully training independent investigators, and have sufficient funds to cover any additional costs of training beyond the CDA provided funds
  - May have co-mentors if appropriate
  - Mentor must provide supporting documentation and should contribute to the development of the training plan

- Require a training plan describing career development activities
  - Grant writing
  - Ethics
    - Must include training in the responsible conduct of research
  - Interaction with other faculty
  - Equipment training

Types of CDAs

- Mentored awards
  - K01, K08, K25, K99/R00

- Non-mentored awards
  - K22

- Landing page for K awards: https://researchtraining.nih.gov/programs/career-development

K01: Mentored Research Scientist Development Award

- Announcement number: PA-16-190

- Purpose: provide "protected time" (3-5 years) for supervised career development experience ultimately leading to research independence
  - May be used for training in a new field depending on awarding institution

- Eligibility
  - Citizen, non-citizen national, or permanent resident of USA
  - Cannot previously or currently be PD/PI on R01, P01, P50, or K award
  - PD/PI of R03, R21, R36, R41, R42, R43, and R44 remain eligible
  - Must have "full-time" appointment at institution
  - Must commit minimum of 75% of full-time effort to career development and research training

- Relevant sponsoring institutions
  - National Institute on Biomedical Imaging and Bioengineering (NIBIB)

K08: Mentored Clinical Scientist Career Development Award

- Announcement number: [PA-16-191](PA-16-191)

- Purpose: provide "protected time" (3-5 years) to support didactic study and/or mentored research for individuals with clinical doctoral degrees
  - May utilize funds for intensive period of didactic training followed by supervised research

- Eligibility
  - Citizen, non-citizen national, or permanent resident of USA
  - Cannot previously or currently be PD/PI on R01, P01, P50, or K award
  - PD/PI of R03, R21, R36, R41, R42, R43, and R44 remain eligible
  - **Must have clinical doctoral degree (includes PhD in clinical disciplines)**
  - Must have full-time appointment at academic institution
  - Must commit to minimum of 75% of full-time effort to career development and research training

- Relevant sponsoring institutions
  - National Cancer Institute (NCI)
  - NIBIB

K08: Mentored Clinical Scientist Career Development Award (contd.)

- Similar award: NCI Mentored Clinical Scientist Career Development Award to Promote Diversity
  - Announcement number: PA-16-400

- Purpose: promote career development of scientists from diverse backgrounds underrepresented in health sciences

K22: The NCI Transition Career Development Award

- Announcement number: PAR-16-293

- Purpose: facilitate transition of investigators in mentored, non-independent research position to independent faculty research positions
  - Provides "protected time" for first 3 years of first independent, tenure-track position

- Eligibility
  - Citizen, non-citizen national, or permanent resident of USA
  - Cannot previously or currently be PD/PI on R01, R29, P01, P50, or K award
  - PD/PI of R03 remain eligible
  - Must have doctoral level degree
  - **Must have at least 2 years of postdoctoral training but less than 8 years of mentored research training after doctoral degree acquisition**
  - Cannot currently or previously hold an independent research faculty position at time of submission
  - Must secure tenure-track, independent faculty position in order to activate the award

- Relevant sponsoring institutions
  - NCI

K25: Mentored Quantitative Research Development Award

- Announcement number: PA-16-194

- Purpose: provide "protected time" (3-5 years) for supervised study and research for professionals with quantitative and engineering backgrounds to integrate expertise with NIH-relevant research
  - Intended for professionals whose research has not been primarily focused on questions of health and disease

- Eligibility
  - Citizen, non-citizen national, or permanent resident of USA
  - Cannot previously or currently be PD/PI on R01, P01, P50, or K award
  - PD/PI of R03, R21, R36, R41, R42, R43, and R44 remain eligible
  - **Must have advanced degree in quantitative area of science or engineering**
  - Experience level can range from postdoctoral level to senior faculty level
    - Candidate must show clear evidence of research productivity and interest in making contributions to research relevant to NIH mission

- Relevant sponsoring institutions
  - NIBIB

K99/R00: The NIH Pathway to Independence Award

- Announcement number: PA-16-193

- Purpose: increase and maintain strong cohort of NIH-supported, independent investigators
  - Specifically to transition outstanding postdoctoral researchers to independent faculty research positions

- Additional details
  - Provides up to 5 years of support – up to 2 years of mentored postdoctoral research and up to 3 years of independent research
  - Applicant should be able to provide compelling rationale for at least one year of mentored research training
  - Must accept independent, tenure-track position at end of K99 phase in order to be eligible for R00 funding

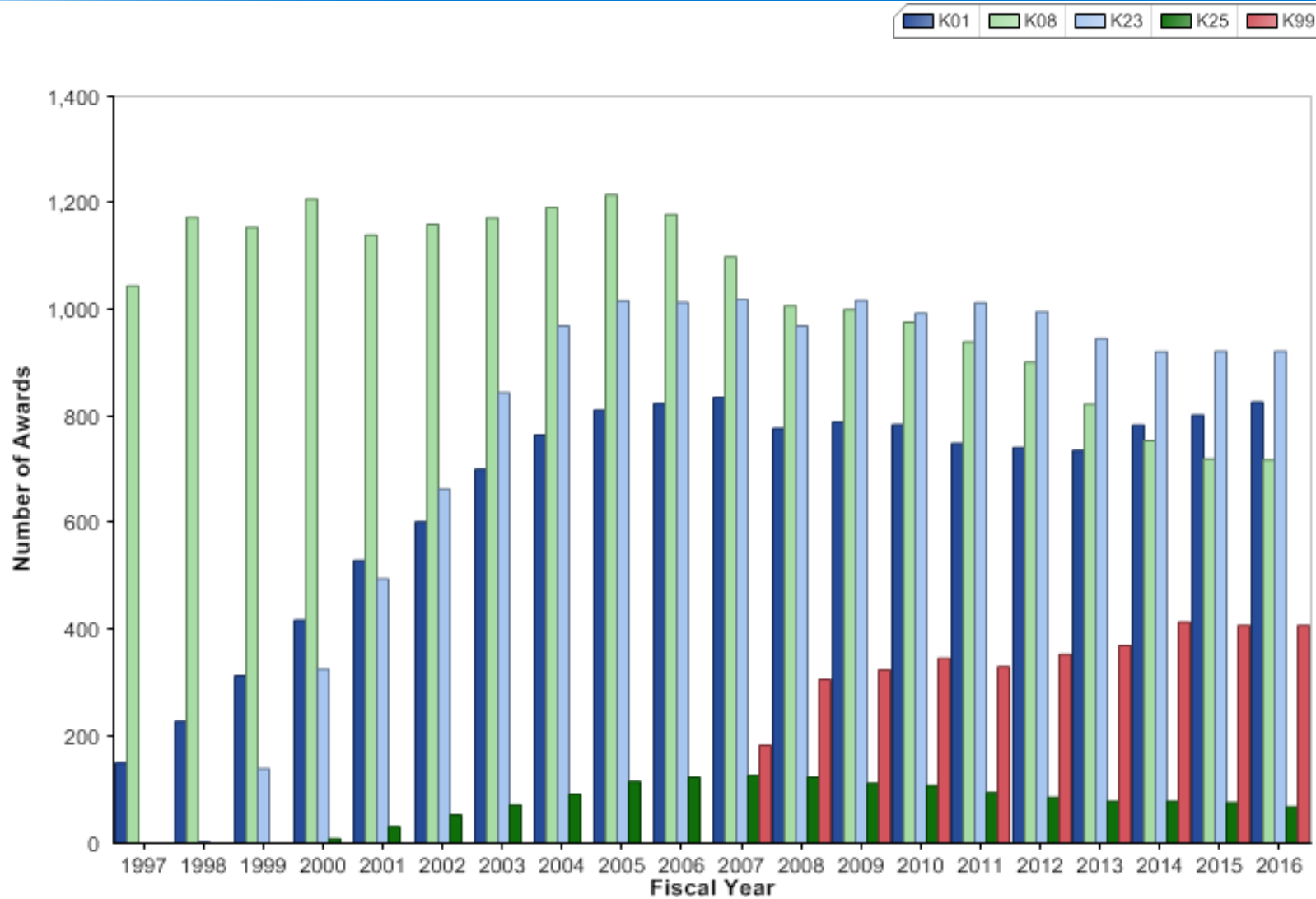# K99/R00: The NIH Pathway to Independence Award (contd.)

- Eligibility
  - No citizenship requirement
  - Cannot have previously been independent PD/PI on NIH research grants or career development awards or have been project leader on sub-project of P01 or P50 grant
  - Must have doctoral-level degree
  - Must be in a mentored, postdoctoral research position at time of application
  - **Must not have more than 4 total years of postdoctoral research training at the time of initial submission**
  - Cannot currently or previously have held independent research faculty position
  - Must commit minimum of 75% of full-time professional effort to career development and research training during K99 phase
    - During R00 phase, 75% of full-time effort must be devoted to research, but does not have to be exclusive to R00-supported research

K99/R00: The NIH Pathway to Independence Award (contd.)

- Relevant sponsoring institutions
  - NCI
  - NIBIB

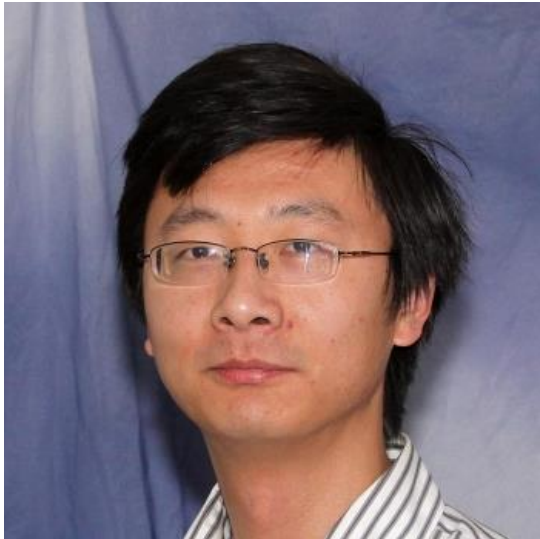Individual Research Career Development Awards
Number of entry-level awards

K99/R00 Mentee and Mentor Panelists
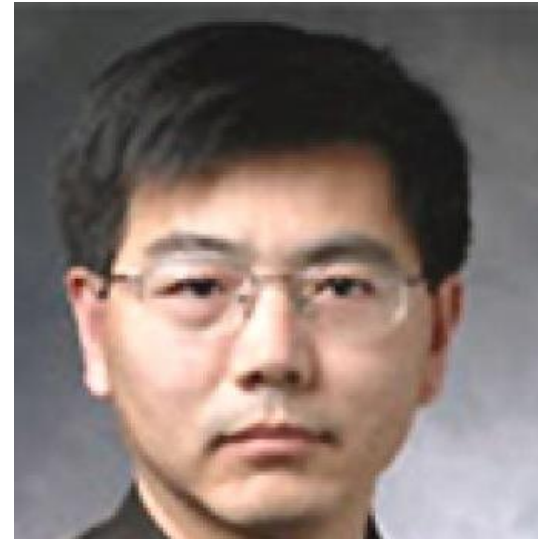
Mentee:

Ruijiang Li, PhD

Assistant Professor, Radiation Oncology

Stanford University

rli2@stanford.edu

Mentor:

Lei Xing, PhD

Jacob Haimson Professor, Radiation Oncology

Stanford University

lei@stanford.edu

Summary

- CDAs designed to promote early success of promising future, independent researchers in health sciences

- Awards require delineation of robust research and career development training plan
  - Developed closely with mentor if mentored award

- K99/R00 award is designed to transition postdoctoral researchers into tenure-track, independent faculty positions through mentored development experience

Thank you!

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