

# Kirschstein Grant Mechanisms & Their Role In Building a Vibrant Research Community

Beverly Savage, CRA

Michael Zoffel, CRA

University of Pittsburgh

# Brief History of Kirschstein Grants

- Formerly known as the NIH Graduate Student Fellowship Program
- In 2002 Congress renamed the program “The Ruth L. Kirschstein National Research Service Award”
- Named for polio vaccine researcher Ruth L. Kirschstein, MD, Director of NIGMS, Deputy Director of the NIH and two time Acting Director of the NIH
- Kirschstein Training Award Budget for FY 2018 – \$21,826,000

# Participating NIH Offices, Institutes and Centers

- ORIP – The Office of Research Infrastructure Programs
  - NIH Strategic Plan – Mission: Insure the Nation's capability to prevent disease
- All 21 of the NIH Institutes
- Two NIH Centers
  - NCATS – National Center for Advancing Translational Sciences
  - FIC – Fogarty International Center

# Types of Kirschstein Awards

- **Individual Awards**

Individual Fellowships – F awards

Career Development Awards – K Awards and R-36

## **Institutional Awards**

Institutional Training Grants – T Awards, D43, K12 and R25

# Eligible Applicant Organizations

- Public/State Controlled Institutions of Higher Education
- Private Institutions of Higher Education
- Nonprofits with 501(c)(3) IRS Status (Other than Institutions of Higher Education)
- Nonprofits without 501(c)(3) IRS Status (Other than Institutions of Higher Education)
- For Profit Small Businesses located within the U.S.

# Eligible Applicant Organizations – Con't

- For-Profit Organizations (Other than Small Businesses) located within the U.S.
- Governments – non-federal located within the U.S.
- Non-domestic (non-U.S.) Entities (Foreign Institutions) may be eligible to apply .
- Non-domestic (non-U.S.) components of U.S. Organizations may be eligible to apply.
- Foreign components, as defined in the *NIH Grants Policy Statement*, may be allowed.

# Applicant Organization Registrations

- Dun and Bradstreet Universal Numbering System (DUNS)
- System for Award Management (SAM) (formerly CCR)
- eRA Commons accounts – Organization (Signing Official) & Program Director (PD)/Principal Investigator (PI)
- Grants.gov

# Institutional Resources Required

- Training Environment – Facilities for high quality research training
- Institutional Financial Support – Available resources to cover ineligible expenses and related training costs (personnel & facility)
- Mentors / Sponsors – Active investigator in the area of the proposed research training and be committed both to the applicant's research training and to direct supervision of his/her research. Should have a successful track record of mentorship.

# Eligible Trainee Pool

- Undergraduates
- Graduate Students
- Post Doctoral Researchers
- Early Stage Investigators
- New Investigators

# Trainee Requirements – Varies by Award Type

- Trainees must be citizen of the United States or:
- Noncitizen National of the United States or:
- Lawfully admitted for permanent residence or:
- Foreign nationals studying in an approved US based institution
- Citizens of LMIC Countries
- Individuals with Asylum/Refugee status **may not be appointed** to a Kirschstein-NRSA training grant until they have also secured permanent residency status.
- Individuals on temporary or student visas are **not eligible** for Kirschstein-NRSA support.

# Undergraduate Trainee Awards

## Baccalauraureate and Master's Degree Candidates

T34 - Ruth L. Kirschstein Undergraduate NRSA Institutional Research Training Grants

T90/R90 - Ruth L. Kirschstein Interdisciplinary Research Training Award (T90) and combined Research Education Grant (R90)

R25 - Research Education Program

SUPP - Research Supplements to Promote Diversity in Health-Related Research (Admin Supplement)

# T34 - NRSA Institutional Training Grants

- Awards to U.S. Domestic institutions that offer a baccalaureate degree
- U.S. Citizens and Permanent Residents
- One grant per eligible institution
- For Honors students majoring in the biomedical sciences
- 24 month appointment (usually Junior & Senior year)
- All programs must provide a summer program at a minimum
- Funds may support per diems, partial tuition, fees, consultant costs, equipment, supplies and limited travel

# T90/R90 - Interdisciplinary Research Training Award (T90) and combined Research Education Grant (R90)

- U.S. Domestic Institutions
- T-90 - U.S. Citizens and Permanent Residents / R-90 – Non-U.S. Citizens
- Goal – To support comprehensive interdisciplinary research training programs by capitalizing on the infrastructure of existing multidisciplinary and interdisciplinary research programs
- T90 funds may support stipends, staff salaries, tuition & fees, health insurance, consultant costs, equipment, research supplies and travel
- R90 funds may support above but pay salary instead of stipends

# R25 - Research Education Program

- U.S. Institutions (Varies by announcement)
- U.S. Citizens and Permanent Residents
- Goal – To complement and/or enhance training to help the workforce meet the nations biomedical, behavioral and clinical research needs
- Focus on expanding diversity of research workforce
- One application or award per institution
- Not intended to replace NRSA Training program (not full time)
- Up to \$350,000 direct costs per year to support stipends, tuition, fees, health insurance, research supplies and limited travel

# SUPP - Research Supplements to Promote Diversity in Health-Related Research (Administrative Supplement)

- Only PD/PIs with active NIH grants may apply
- Programs have to work within the scope of the NIH project
- Focus on expanding diversity of research workforce
- May include participants from high school through post doctoral
- Awards limited to no more than parent award and reflect proposal needs

# Graduate Trainees

Doctoral Candidates Enrolled in Predoctoral & Clinical Programs

R36 - Dissertation Award

DP5 - Early Independence Award

T32 - Ruth L. Kirschstein Institutional National Research Service Award

T35 - Ruth L. Kirschstein Short-Term Institutional National Research Grant

T15 - Continuing Education Training Grants

D43 – International Research Training Grant

R25, T90/R90 & SUPP (Diversity) - (Discussed with Undergraduate)

# R36 - Dissertation Award

- U.S. Domestic Institutions
- U.S. Citizens and permanent residents
- Goal – To support dissertations that respond to the sponsors mission.
- One application per qualified applicant, all qualifying per institution
- Applicant matriculated in an accredited doctoral program
- Up to \$40,000 direct costs per year to support stipends / salaries, tuition & matriculation fees, data collection / coding, research supplies and travel to scientific meetings

# DP5 - Early Independence Award

- U.S. Domestic Institutions
- No citizenship requirement
- Goal – To support early entry into independent research careers forgoing traditional postdoctoral training.
- Up to two applications per qualified institution
- For candidates who are currently conducting mentored research , who are supported primarily by other investigators and have no space directly assigned to them by the institution.
- Up to \$250,000 direct costs per year for up to five years with an 80% effort commitment require for the first two years.

# T32 - Ruth L. Kirschstein Institutional National Research Service Award

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Enrolled in a research or clinical doctoral or post doctoral program
- Pre-doctoral and Post-doctoral are expected to pursue their research full time defined as 40 hour per week.
- Funds may support stipends, tuition & fees, training related costs (healthcare, consultant costs, equipment, supplies) and program related travel.

# T35 - Ruth L. Kirschstein Short-Term Institutional National Research Grant

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Enrolled in a research or clinical doctoral program
- Pre-doctoral and Post-doctoral are expected to pursue their research full time defined as 40 hour per week for a period of two to three months.
- Funds may support stipends, tuition & fees, training related costs (healthcare, consultant costs, equipment, supplies) and program related travel.

# T15 - Continuing Education Training Grants

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- May be used to support institutions establishing training programs
- Trainees must be enrolled in a research or clinical doctoral or post doctoral program and have attained a baccalaureate degree
- Pre-doctoral and Post-doctoral are expected to pursue their research full time defined as 40 hour per week.
- Funds may support stipends, tuition & fees, training related costs (healthcare, consultant costs, equipment, supplies) and program related travel.

## D43 – International Research Training Grant

- For Low and Middle Income Countries – As defined by the World Bank
- LMIC and U.S. Domestic Institutions
- LMIC citizens
- Supports research into International diseases
- Trainees are expected to pursue their research full time defined as 40 hour per week.
- Up to \$230,000 per year may support stipends, tuition & fees, training related costs (healthcare, publication costs, equipment, supplies) and program related travel, limited clerical costs.

# Postdoctoral Trainees

Completed Doctoral Degree Training with a PI

F32 – Ruth L. Kirschstein Postdoctoral Individual National Research Service Award

K01 – Mentored Research Scientist Career Development Award

K07 – Academic Career Development Award

K08 – Mentored Clinical Scientist Research Career Development Award

K12 – Clinical Scientist Research Career Development Award

K22 – Career Transition Award

# Postdoctoral Trainees - Continued

K23 – Mentored Patient-Oriented Research Career Development Award

K25 – Mentored Qualitative Research Career Development Award

K99/R00 – Pathway to Independence Award

K43 – Emerging Global Leader Award

K76 – Emerging Leaders Career Development Award

LRP - Loan Repayment Program

R25, T90/R90 & SUPP (Diversity) - (Discussed with Undergraduate)

T32, T15, D43 (Discussed with Graduate)

# F32 – Ruth L. Kirschstein Postdoctoral Individual National Research Service Award

- U.S. Domestic Institutions - award is tied to individual and is not transferrable
- U.S. Citizens and Permanent Residents
- Enrolled in a clinical doctoral or post doctoral program
- Post-doctoral are expected to pursue their research full time defined as 40 hour per week but may devote effort above 75% to another project.
- Funds may support stipends, tuition & fees, training related costs (healthcare, consultant costs, equipment, supplies) and program related travel.
- No F&A or indirect costs allowable

# K01 – Mentored Research Scientist Career Development Award

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Provides support and protected time for an intensive, supervised career development experience leading to research independence.
- A clinical trial may be required, basic research on humans.
- Candidates must have a research or health profession doctoral degree and are expected to pursue their research full time defined as 40 hour per week.
- Funds may support salary & fringe benefits, tuition & fees, training related costs (computer time, technical personnel, equipment, supplies) and program related travel.

# K07 – Academic Career Development Award

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Help develop the institution's pool of expertise and enhance research and educational capacity.
- Candidate must have a full time appointment
- Candidates must have a research or health profession doctoral degree and are expected to pursue their research between 25% and 50% of the time.
- Up to \$125,000 in direct costs with a maximum of \$25,000 for appropriate research support costs. Research coordinator salary support is allowable. No salary for Mentors and admin staff.

# K08 – Mentored Clinical Scientist Research Career Development Award

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Prepares qualified individuals for careers in health related research.
- A clinical trial may be required, basic research on humans.
- Candidates must have a clinical doctoral degree, a full time appointment and are expected to pursue their research at least 75% of the time.
- Funds may support salary & fringe benefits, tuition & fees, training related costs (computer time, technical personnel, equipment, supplies) and program related travel.

# K12 – Clinical Scientist Research Career Development Award

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Prepares qualified individuals for independent research careers and facilitate their transition to more advanced mechanisms (K08, K23).
- A clinical trial is optional it may be led by another investigator
- Up to 10% effort may be allowable for clinical trial PD/PI
- Scholars must have a clinical doctoral degree, a full time appointment and are expected to pursue their research a minimum of 75% of the time.
- Scholar funds may support salary & fringe benefits, tuition & fees, training related costs (computer time, technical personnel, equipment, supplies), travel for scholar.

# K22 – Career Transition Award

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Assist transition from postdoctoral fellow to assistant professor and initiate a successful career as an independent biomedical researcher.
- Candidate must have no more than six years of post-doctoral experience at the time of submission.
- Candidates must have a research or health profession doctoral degree and are expected to pursue their research at least 75% of the time.
- Funds may support salary & fringe benefits, tuition& fees, training related costs (computer time, technical personnel, equipment, supplies) and program related travel.

# K23 – Mentored Patient-Oriented Research Career Development Award

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Prepares qualified individuals for independent research careers.
- A mentor must be identified at time of submission.
- A clinical trial may be required – basic research on humans.
- Scholars must have a clinical doctoral degree, a full time appointment and are expected to pursue their research a minimum of 75% of the time.
- Scholar funds may support salary & fringe benefits, tuition & fees, training related costs (computer time, technical personnel, equipment, supplies), travel for scholar.

# K25 – Mentored Qualitative Research Career Development Award

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Designed to prepare quantitative research scientists to assess outcomes of and conduct basic human research.
- A mentor must be identified at time of submission.
- A clinical trial may be required – basic research on humans.
- PI must have an advanced degree in a quantitative science or engineering and devote 75% effort to the research.
- Funds may support salary & fringe benefits, tuition & fees, training related costs (computer time, technical personnel, equipment, supplies), travel for scholar.

# K99/R00 – Pathway to Independence Award

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Prepares qualified individuals for independent research careers, candidates must have no more than four years of postdoctoral research experience.
- K99 mentored up to two years / R00 unmentored up to three years.
- A clinical trial may be required.
- Scholars must have a clinical doctoral degree, a full time appointment and are expected to pursue their research a minimum of 75% of the time.
- Scholar funds may support salary & fringe benefits, tuition & fees, training related costs (computer time, technical personnel, equipment, supplies), travel for scholar.

# K43 – Emerging Global Leader Award

- For Low and Middle Income Countries – As defined by the World Bank
- LMIC and U.S. Domestic Institutions
- LMIC citizens
- Helps junior faculty research launch an independent research career.
- Trainees are expected to devote 75% effort to their research.
- Up to \$105,000 per year may support stipends, tuition & fees, training related costs (healthcare, publication costs, equipment, supplies) and program related travel, limited clerical costs.

# K76 – Emerging Leaders Career Development Award

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Prepare emerging scientists to take an active leadership role in transformative change to improve research and healthcare outcomes.
- A clinical trial may be required
- Candidate is expected to have held a competitively funded research award as PI/PD.
- Candidates must have a research or health profession doctoral degree and are expected to pursue their research at least 75% of the time.
- Up to \$225,000 for five years for salary, fringe benefits and justifiable research costs to effect change and advance new developments.

# LRP - Loan Repayment Program

- The LRP reduces financial pressure on researchers by funding as much as \$35,000 per year in qualified educational debt in exchange for a commitment to engage in NIH mission-relevant research.
- Mission relevant research is defined and identified in the NIH guide.

# Young Investigators / Early Career

## Transitioning to Independence – PIs or Mentored

F05 – International Research Fellowships

K02 – Independent Research Scientist Development Award

DP2 – NIH Director's New Innovation Award

SUPP – Research Supplements to Promote Re-Entry into Biomedical and Behavioral Research Careers (Administrative Supplement)

R25, SUPP(Diversity) – (Discussed with Undergraduate)

K01, K07, K08, K22, K23, K25, K99/R00, K43, K76, LRP – (Discussed with Post Doctoral)

# F05 – International Research Fellowships

- U.S. Domestic Institutions - award is tied to individual and is not transferrable
- Non-Immigrant Foreign Scientists
- Doctoral degree in biomedical or behavioral science required
- Candidate must identify an sponsoring institution at submission.
- Up to \$300,00 per year direct costs - funds may support stipends, tuition & fees, training related costs (healthcare, consultant costs, equipment, supplies) and program related travel.
- No F&A or indirect costs allowable

# K02 – Independent Research Scientist Development Award

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Candidates must have a full-time appointment at an academic institution and are required to pursue their research at least 75% of the time.
- Candidate are expected to have research support at the time of submission.
- An independent clinical trial proposal may be required at submission.
- Up to five years - funds may support salary & fringe benefits, tuition & fees, training related costs (computer time, technical personnel, equipment, supplies) and program related travel.

# DP2 – NIH Director's New Innovation Award

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Candidates must qualify as an Early Stage Investigator (first 10 years of post doctoral or post-residency)
- Candidate are expected to have independent researcher status and have an active or submitted R-01
- A minimum of 25% or 3 calendar month effort commitment by PI
- Research should attempt to challenge or shift current research and clinical practice

# DP5 – Early Independence Award

- U.S. Domestic Institutions
- No citizenship requirement
- Within 12 months preceding or completing doctoral degree or medical residency
- Up to two applications per institution
- Expected to pursue their research a minimum of 80% of the time.
- Not an independent researcher at the time of submission

# SUPP – Research Supplements to Promote Re-Entry into Biomedical and Behavioral Research Careers (Administrative Supplement)

- Only PD/PIs with active NIH grants may apply
- Candidates with doctoral degree and at least one year but less than eight years of research career interruption
- Not intended to fund graduate training or career changes
- Programs have to work within the scope of the NIH project
- Geared to supporting unfunded activities or cost increases within original project scope

# Established Investigators

## PIs & PDs

D71 - International Research Training Planning Grant

F33 - Ruth L. Kirschstein National Research Service Awards for Senior Fellows

K05 - Senior Research Scientist Award

K18 - Research Career Enhancement Award for Established Investigators

K24 - Midcareer Investigator Award in Patient-Oriented Research

K26 - Midcareer Investigator Award in Biomedical and Behavioral Research

R25, T34, T90/R90, SUPP(Diversity) - (Discussed with Undergraduate)

T32, T35, T15, D43 - (Discussed with Graduate)

K07, K12, K25 - (Discussed with Postdoctorate)

F05 , SUPP (Re-Entry) - (Discussed with Young Investigators)

# D71 - International Research Training Planning Grant

- For Low and Middle Income Countries – As defined by the World Bank
- Non-Domestic Institutions (primarily LMIC)
- Established Investigator with research and training experience in the LMIC country
- Assess current programs, identify available resources, define vision and project roles, identify trainees
- Up to \$46,000 for one year to plan program to be carried out with D43 or other funding

# F33 - Ruth L. Kirschstein National Research Service Awards for Senior Fellows

- U.S. Domestic and Foreign Institutions - award is tied to individual and is not transferrable
- U.S. Citizens and Permanent Residents
- Established Investigator – at least seven years experience
- Funds may support stipends, tuition & fees, training related costs (healthcare, equipment, supplies) and program related travel.
- No F&A or indirect costs allowable

# K05 - Senior Research Scientist Award

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Research or clinical degree and peer reviewed support required
- Candidate must have a full time appointment at the applicant academic institution
- Candidate must devote 75% effort to the research
- Salary and fringe plus \$25,000 for supplies, travel and statistical services

# K18 - Research Career Enhancement Award for Established Investigators

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Research or clinical degree and a track record of peer reviewed support
- Candidate must have a full time appointment at the applicant academic institution
- Short term (one year or less) mentored transition award
- Candidate must devote 50% effort to the research

# K24 - Midcareer Investigator Award in Patient-Oriented Research

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Health-Professional Doctoral degree and Mid-Career professional status
- Candidate must demonstrate the need for protected time to enhance their mentoring skills
- Candidate must commit to devoting 25% to 50% effort to professional development
- Salary and fringe plus \$50,000 for supplies, travel and statistical services

# K26 - Midcareer Investigator Award in Biomedical and Behavioral Research

- U.S. Domestic Institutions
- U.S. Citizens and Permanent Residents
- Veterinary Medicine Doctoral degree and Mid-Career professional status
- Candidate must demonstrate the need for protected time to enhance their research and mentoring skills
- Candidate must commit to devoting 25% to 50% effort to professional development
- Salary and fringe plus \$25,000 for supplies, travel and statistical services

# Things to Remember

- Support for indirect costs is generally limited to 8% but is sometimes replaced with an institutional allowance which may be used to cover indirect costs.
- Pre-award costs are generally not allowable in fellowships (F)
- Fellowships (F) and Career Development (K) are usually awarded under Expanded Authorities but Institutional Training grants (T) are not.

# Resources

- T32 FAQ and re-budgeting matrix  
<https://www.nigms.nih.gov/training/instpredoc/Pages/predoc-training-grants-faqs.aspx>
- NIH Grants Policy Statement
- <https://grants.nih.gov/grants/policy/nihgps/HTML5/introduction.htm>
- Kirschstein Grants Info.
- <https://researchtraining.nih.gov/programs/training-grants>

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