NIH Grant Mechanisms for Early Stage Investigators (ESIs)

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Outline

• Overview of Grant Mechanisms
• Career Development Awards (‘K’)
• ‘R’ Awards
• Loan Repayment Program
• Application Pointers
Early Stage Investigator (ESI)/New Investigator (NI)

- A Program Director / Principal Investigator (PD/PI) who has completed their terminal research degree or end of postgraduate clinical training, whichever date is later, within the past 10 years and who has not previously competed successfully as PD/PI for a substantial NIH independent research award.

**NICHD will include ESI investigator status as one of the program priorities when considering funding of eligible applicants.**
Extension of ESI Status

• Some researchers may have lapses in their research or research training or have experienced periods of less than full-time effort.

• NIH will consider requests to extend the ESI status period for reasons that can include:
  • medical concerns
  • disability
  • family care responsibilities
  • extended periods of clinical training
  • natural disaster
  • active duty military service

• Determined on a case by case basis at the discretion of NIH

Video available at: https://www.youtube.com/watch?v=2Fr9gN7cymQ&feature=youtu.be
Overview of NIH Award Mechanisms

**Pre-doctoral**
- F30/F31 Individual
- T32 Institutional

**Transition**
- F32 Individual
- T32 Institutional
- K01 Research Scientist
- K08 Clinical Scientist
- K23 Patient Oriented
- K24 Mid-Career
- K12 Institutional

**Faculty**
- R03 Small
- R21 Exploratory
- R01 Research
- P01 Program Project
- U Cooperative
K Awards: Common Features

• Eligibility:
  • US citizen or non-citizen national
  • Doctoral degree
  • Requires Mentor
  • Cannot have had prior R01, ‘P” Award

• Expectation:
  • 75% protected time
  • 3-5 years; NICHD allows total of 6 yrs of training support
  • $100,000 salary + fringe
  • $25,000 research support
  • Encouraged to apply for independent (R) funding during award
Training and Career Development
NICHD Scientific Program Contact

Dennis A. Twombly, Ph.D.

• Phone: 301-451-3371

• Email: dtwombly@mail.nih.gov
Career Development Awards: Independent

• **K01**: Mentored Research Scientist Development Award
  • Research or health profession doctorate
  • NICHD: Rehabilitation Research, Child Abuse and Neglect, and Population Research

• **K08**: Mentored Clinical Scientist Development Award
  • Clinical doctoral degree (MD, OD, DDS, DVM, PharmD, PhD in clinical disciplines)
  • Biomedical/behavioral research including translational studies

Career Development Awards: Independent (continued)

- **K23**: Mentored Patient-Oriented Research Career Development Award
  - Health profession doctoral degree
  - Patient Oriented Research

- **K25**: Mentored Quantitative Research Career Development
  - Quantitative (e.g., statistics, economics, computer science, physics, chemistry) and engineering backgrounds
  - NIH-relevant biomedical research
K99/R00 Pathway to Independence Award

• Eligibility:
  • No US citizenship requirement
  • No more than 4 years of postdoctoral research experience at the time of application receipt date

• Expectation:
  • 75% effort to research project (50% for surgical subspecialties)
  • Award recipients are expected to compete successfully for independent R01 support during the R00 phase
  • NICHD $75,000 + fringe +$25,000 research support (K99)
  • R00 <$250,000/yr

• Two phases:
  • 1-2 years of mentored support
  • Up to 3 years of independent support contingent on an independent tenure-track research position
Institutional K Awards (K12)

- Single site awarded with investigators at multiple sites
  - RSDP
  - PSDP
  - PCCTSDP
- Multiple sites awarded
  - WRHR
  - BIRCWH
  - CHRCDA

Trainees apply directly to the program site, not to NIH
Reproductive Scientist Development Program (RSDP)

- Junior OB/GYN faculty or last year of subspecialty fellowship
- Basic/translational projects
- Two phases:
  - Phase 1 (2 years): 100% research time
  - Phase 2 (2 years): 75% research time
- $125K salary and fringe/yr with $25K research support/yr
- Program based at University of Missouri (Danny Schust, MD)
- Louis DePaolo, PhD
  depaolol@exchange.nih.gov
Women’s Reproductive Health Research Program (WRHR)

- Junior OB/GYN faculty or last year of subspecialty fellowship
- 75% protected time for 2 to 5 yrs
- Basic, translational, or clinical projects in array of OB/GYN research topics
- 15 WRHR sites/30 Scholars
- Lisa Halvorson, MD
  lisa.Halvorson@nih.gov
Building Interdisciplinary Research Careers in Women’s Health (BIRCWH)

ORWH, NICHD, NCI, NIAID, NIDCR, NIDA, IAAA, NIA, NIAMS

- Clinical PhD, MD, MD-PhD, DVM, other
- 75% protected time for 2 to 5 yrs (50% for surgical subspecialties)
- Junior faculty with plan to conduct interdisciplinary basic, translational, behavior, clinical or health services relevant to women’s health (emphasis on sex differences)
  - reproductive biology
  - cancer
  - depression, addiction, adverse childhood experiences
  - neuro-immune interactions
  - HIV-related
  - cardiometabolic risk burden
  - urinary microbiome in health & disease
- Office of Research on Women’s Health Contact: Lisa Begg, DrPH, RN
  beggl@od.nih.gov
Pediatric Scientist Development Program (PSDP)

- Clinical fellows and junior faculty in Pediatrics
- Basic biomedical, clinical sciences, population sciences, or health services research
- 2 - 3 years
- 75% research time
- $100K salary and fringe/yr with $25K research support/yr
- Program based at Duke University
- Karen Winer, MD
  winerk@mail.nih.gov
Child Health Research Career Development Award (CHRCDA)

- Junior faculty within 4 years of completing subspecialty training
- Research with mentor outside of their pediatric department
- 12 sites nationally
- 2 – 4 years
- 75% research time
- $100K salary and fringe/yr with $25K research support/yr
- Andrew Bremer, MD, PhD
  andrew.bremer@nih.gov
Pediatric Critical Care and Trauma Scientist Development Program (PCCTSDP)

- Physician-scientists (MD or DO)
- Anyone whose research interests aim at improving long-term outcomes and QoL for children who sustain critical illness or traumatic injury
- Two-phase national model
  - Phase 1: Years 1 – 2: Research supported by K12 Program
  - Phase 2: Years 3 – 5: Research supported by institution or individual K
- University of Utah
- Robert Tamburro, MD, MSc; robert.tamburro@nih.gov
- Tammara Jenkins, MSN, RN; tjenkins@mail.nih.gov
Rehabilitation Research Career Development Programs

• General Information
  • Four national networks
  • 2-3 yrs of salary followed by another 2-3 yrs of broader support

• Physical/occupational therapists and allied health professionals
  • Comprehensive Opportunities in Rehabilitation Research Training (CORRT)
  • Rehabilitation Research and Career Development (RRCD) Program for Physical & Occupational Therapists

• Bioengineers
  • Rehabilitation Engineering Career Development Program

• Clinicians involved in Neurological Rehabilitation
  • Neurorehabilitation and Restorative Neuroscience Training Network (NRNTN)

• Ralph Nitkin, PhD
  nitkinr@exchange.nih.gov
## Comparison of R03, R21, and R01

<table>
<thead>
<tr>
<th>Award Mechanism</th>
<th>R03*</th>
<th>R21*</th>
<th>R01</th>
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<tbody>
<tr>
<td>Title</td>
<td>NIH Small Grant Program</td>
<td>NIH Exploratory/Development Grant Award</td>
<td>Research Project Grant</td>
</tr>
<tr>
<td>Scope</td>
<td>Pilot or feasibility; small self-contained; secondary analysis</td>
<td>Exploratory; novel techniques, agents, methods or models; may require risk</td>
<td>Discrete, circumscribed project in area of expertise</td>
</tr>
<tr>
<td>Length</td>
<td>Up to 2 yrs</td>
<td>Up to 2 yrs</td>
<td>Up to 5 yrs</td>
</tr>
<tr>
<td>Allowable Costs</td>
<td>Up to $50,000/yr</td>
<td>Not to exceed $275,000 for entire period</td>
<td>Up to $250,000/yr (unlimited)</td>
</tr>
</tbody>
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*R03/R21 not accepted by all Institutes; some have IC-specific announcements*
Am I doing a Clinical Trial??

- Does your study:
  - Involve one or more human subjects?
  - Involve one or more interventions?
  - Prospectively assign human subject(s) to intervention(s)?
  - Have a health-related biomedical or behavioral outcome?

- If “yes” to ALL these questions, your study is considered a clinical trial and you **MUST** apply to a FOA that accepts CTs

https://grants.nih.gov/policy/clinical-trials.htm
Extramural LRP Data

- Website: https://www.lrp.nih.gov
- Phone: 866-849-4047
- Email Inquiries: lrp@nih.gov

- Extramural
  - Contraception and Disability
  - Clinical
  - Clinical Disadvantaged Backgrounds
  - Health Disparities
  - Pediatric
Extramural Loan Repayment Program

- Doctoral Health Professions: MD, PhD, OD, DDS, DVM, etc.
- Citizenship: U.S. citizen, U.S. national, or permanent resident
- Debt: educational debt > 20 percent of salary
- 1st year: amount awarded is equal to one-fourth of the total eligible debt up to $50,000
- Perform research > 20 hrs/week
- Renewal for 1-2 years
- Research not prohibited by federal law or NIH/HHS policy
- Deadline: September 1 - Nov 15, 2019 (future dates not yet released)

- Dr. Steve Kaufman
  kaufmans@mail.nih.gov
Pointers for submitting *any* application?

- Start the writing process early
- Be sure you are applying to the right LRP/award mechanism
- Know the funding priorities of the NIH Institute that will review your application
- Form an advisory team: include your mentor(s) and other trusted investigators who know your field
- Talk to your Program Officer/LRP Liaison – specific aims
- Identify people for strong letters of recommendation/support
- Contact your lender for loan information (LRP)
- Submit the application before deadline to allow time to correct any errors in grants.gov
NIH Regional Seminars

- Fundamentals of the NIH
- Compliance
- Peer Review
- Grant Writing for Success
- Pre-Award and Post-Award Issues
- Animal and Human Subject Research
- Electronic Interactions with NIH
- New Investigators’ Track: Mapping your Career

Meeting Schedule

Presentation Archive
- [https://regionalseminars.od.nih.gov/phoenix2019/presentations/](https://regionalseminars.od.nih.gov/phoenix2019/presentations/)
Questions?

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Chief, GHDB

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