

NIH and NHLBI: Research Training Opportunities

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NIH Supports

Biomedical research and *research training* which advances knowledge in biology and medicine and related fields.



- **Basic research** improves our understanding of biological systems and behavior.
- **Clinical research** evaluates the **safety and effects** of treatment and prevention approaches through clinical trials and comparative effectiveness studies.
- Research leads to new methods for disease **treatment, management, and prevention.**

Are you interested in a career that includes research?

- What are you are interested in?
- NIH supports research training opportunities
- Goal is to become an *independent* scientist
- 2 tracts:
 - Scientist (PhD) development
 - Clinician (MD, DVM) scientist development
- Ask early, ask often...

Steps to Research Independence

	Pre doctoral training	Post doctoral training	Post doctoral individual awards	Early career individual mentored scientist award	<i>Independent scientist: Successfully compete for NIH research grants</i>
PhD	T32 Institutional Award	T32 Institutional Award	F32 K99/R00		R00 R01
MD	MD/PhD Individual Award (F30)	T32 Institutional Award	F32 K99/R00	Institutional KL2, K12 Individual K08, K23	R01

Pre & Postdoctoral Institutional Research Training Awards (T32):

- T32 **pre**doctoral research training to 5 yrs
- T32 **post**doctoral research training to 3 yrs
- Stipend, tuition, training related expenses
- Requires 90% time commitment
- Interested individual applies directly to the program of interest

Institutional Pre/Post Doc T32:

- NIH funds >2400 research training programs
- NHLBI, Cardiovascular division >130 programs
- To find current programs see
- <http://projectreporter.nih.gov/reporter.cfm>
- <http://grants.nih.gov/training/outcomes.htm>
(websites subject to change)

Institutional K awards (CTSA KL2, K12):

- “K” = Mentored career development awards
- Starting late postdoc or early faculty
- Apply to the program at a university
- 2-3 years, 75% effort
- Stipend, fringe, training related-expenses, tuition, travel
- *Some transition into competitive independent researchers with this training.....*

Individual Mentored K awards:

- Goal is to transition into an NIH competitive investigator
- Starts in late Postdoc/Early faculty
- Applications are submitted by the individual to an NIH Institute
- Grant is reviewed by a study section
- Award provides 3-5 years of training at 75% (assistant professor years)

Individual K awards:

- 5 parts: individual, mentoring team, institutional support, research, & career development plan
- Key issue is capacity of the individual to become an independent researcher
- Must provide strong justification
- Mentors must by have a history of NIH funding
- Apply for “R” or research funding during award
- *Transition to independence...*

Individual K awards:

- K23 patient-oriented research
- K08 bench science or population research
- And many more....
- Not all institutes provide all awards...
- When applying, check out institute mission & budget...
- Talk with program officials at multiple institutes....

Research Independence: Competing for NIH Research Funding

- R01 is the gold standard of NIH competitive research awards
- Oldest and most utilized research funding mechanism
- R01 supports a discrete, specified, circumscribed project to be performed by the named investigators in an area representing his/her specific interest and competencies
- May be investigator-initiated or may be in response to a program announcement issued by an Institute
- Provides monies for research, salary support, equipment, & indirect costs to the University

R01: Research Review Criteria

- Scored review criteria: significance, investigators, innovation, approach, & environment
- Overall impact/priority score to reflect their assessment of the likelihood for the project to *exert a sustained, powerful influence on the research field(s) involved*

Sometimes the decision to pursue research is decided by *debt & student loans.....*

- *NIH Loan Repayment Program*
- <http://www.lrp.nih.gov/>
- Programs in
 - Clinical Research
 - Pediatric research
 - Health disparities research
 - Clinical research for individuals from disadvantaged backgrounds

For more information

- www.nih.gov
 - See institute specific sites. Note areas of scientific interest. See listserve opportunities.
- www.nhlbi.nih.gov
 - Research Training Information
- NHLBI CV Research Training
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