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 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

<table>
<thead>
<tr>
<th>Pre doctoral training</th>
<th>Post doctoral training</th>
<th>Post doctoral individual awards</th>
<th>Early career individual mentored scientist award</th>
<th>Independent scientist: Successfully compete for NIH research grants</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>T32 Institutional Award</td>
<td>T32 Institutional Award</td>
<td>F32 K99/R00</td>
<td>R00 R01</td>
</tr>
<tr>
<td>MD/PhD Individual Award (F30)</td>
<td>T32 Institutional Award</td>
<td>F32 K99/R00</td>
<td>Institutional KL2, K12 Individual K08, K23</td>
<td>R01</td>
</tr>
</tbody>
</table>
Pre & Postdoctoral
Institutional Research Training Awards (T32):

- T32 predoctoral research training to 5 yrs
- T32 postdoctoral 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….
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
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**
- 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 listserv opportunities.

- **www.nhlbi.nih.gov**
  - Research Training Information

- NHLBI CV Research Training
  - Drs. Drew Carlson, Jane Scott, & Ms. Tawanna Meadows, 301.435.0535