

#### SPONSORED RESEARCH AND PROGRAM DEVELOPMENT

www.rockefeller.edu/sr-pd/

#### Grant Writing Basics

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# Resources for Finding Funding Opportunities

- University Sponsored Research & Program Development (SR-PD)
  - Your Grants Management Specialist
  - SR-PD Website
  - SR-PD Emails
- Online resources such as <u>Community of Science</u>
   (COS), <u>InfoEd</u> SPIN, <u>Grantsnet</u> and others
- Mentor and peers



#### Where to Apply

- Federal
  - NIH
  - NSF
  - Department of Defense
  - Other agencies as funding programs are made available
- Foundations
- Industry
- Internal (via Development)



#### Strategic Resources

- Mentor
- Peers
- RU SR-PD
  - Forms and format
  - Budget (e.g. personnel effort & costs, indirect costs)
  - Boilerplates
  - Your Grants Management Specialist
  - Website
- Sponsor's website
- NIH
  - RePORT
  - Program Official
  - Award trends and success rates
  - Office of Extramural Research



### Types of Funding

- Fellowships
- Career Development (ex. NIH K08 and K23; non-NIH)
- Research Grants
  - Small (ex. NIH R03)
  - Exploratory (ex. NIH R21)
  - Individual research grants (ex. NIH R01)
  - Internal Pilot Study grants (ex. CTSA)
  - Collaborative center/program grants
  - Non-NIH sources using similar mechanisms



#### NIH Career Development Awards

- K08 Mentored Clinical Scientist Research Career Development Award supports supervised research career development experience in the fields of biomedical and behavioral research
- K23 Mentored Patient-Oriented Research Career Development Award supports investigators committed to research on patient-oriented research
- K99/R00 Pathway to Independence Award



### NIH Career Development Awards Summarized

|  | K08                          | K23                             | K12                                       | K99/R00   |
|--|------------------------------|---------------------------------|---|---|
| Citizenship Eligibility                | USA or Permanent<br>Resident | USA or<br>Permanent<br>Resident | USA or<br>Permanent<br>Resident           | Not limited to USA<br>or Permanent<br>Resident              |
| Length of Project Period               | Up to 5 years<br>mentored    | Up to 5 years<br>mentored       | Up to 5 years<br>mentored                 | Up to 2 years<br>mentored                                   |
| Estimated Range of Annual Direct Costs | \$123,000 -<br>\$224,000     | \$123,000 -<br>224,000          | Varies<br>(funds multiple<br>scholars)    | \$90,000<br>(check <u>Table of I/C</u><br><u>contacts</u> ) |
| Minimum effort committed to research   | 75%                          | 75%                             | 75%                                       | 75%   |
| Letters required                       | Mentor plus 3 referees       | Mentor plus 3 referees          | None                                      | Mentor plus 3 referees                                      |
| Participating NIH Institutes           | Most institutes              | Most institutes                 | NCI, NEI, NICHD,<br>NIDA, NIGMS,<br>NINDS | Most institutes   |



## Tips on NIH Career Development Awards

- Require a minimum effort of 75% on research
- Strong/experienced mentor(s) is critical
- Training plan must be clear, focused, as well as interesting and practical
- Biosketches should reflect the potential of the candidate and the qualifications of the mentor



#### Early Stage of Proposal Planning

- Start early, approx. 6-9 months before deadline
- Review the funding program/announcement
- Research recently <u>funded proposals</u>
- Find out <u>success rate</u> at target agency/institute
- Discuss your research/proposal with your mentor
- Contact (e.mail) the Program Official/Director determine/confirm Institute/Center assignment
- Attend grant writing workshops at RU & national mtgs/conferences
- Secure reference letters (for K-mechanism applications)
- Register with sponsor
- Work with your Grants Management Specialist



#### Preparing the Proposal

- Make note of the deadline
- Verify eligibility with your Grants Management Specialist
- Read closely the guidelines/instructions including special submission requirements
- Design your outline and research plan according to the sponsor's instructions
- Fully address the review criteria and in the order presented by the sponsor



# Compliance Issues: Human Subjects

- Research protocol must be submitted and reviewed by the University Institutional Review Board (IRB) before research can start
- Individuals involved with human subjects must have Protection of Human Subjects Certification
- Address sponsor's requirements no page limit; describe collection of human subjects info/specimens for all groups
- Check <a href="http://clinfo.rockefeller.edu/">http://clinfo.rockefeller.edu/</a> for more information
- Exempt (E4) human subjects research include statement regarding source of tissue samples/data, e.g. pathology or medical records, and that there are no identifiers linked to study subjects



#### Additional Elements (1)

- Research plan
  - Select agent research hazardous biological agents and toxins identified by HHS or USDA
  - Consortium/contractual arrangements
  - Resource sharing
    - Data sharing plan required if annual direct costs higher than \$500,000
    - Model Organism sharing plan required if proposal includes development of a model organism
  - Letters of Support/Collaborations
- Description of resources and environment refer to RU <u>Resources</u> boilerplate
- Cover letter request assignment to Institute/Center and/or study section, include name of program/review officers



#### Additional Elements (2)

- Easy to Read
- Format
  - Font type and size
  - Margins
- Page limits
- Accurate check figures, tables, references cited
- Appendix materials follow guidelines



#### Submission Process

- Complete University "routing form"
- For <u>full review and institutional sign-off</u>, submit full packet to SR-PD at least 5 business days before sponsor's deadline
- If paper submission: after institutional sign-off, send the required # of copies and forward a final copy to SR-PD
- If electronic submission: final copy will be submitted by Authorized Organizational Representative (AOR)



#### Post-submission

- Receive confirmation of receipt and assignment
- Note sponsor's decision date
- Receive summary statement
- If fundable score: submit "Just-in-Time" information and address any pending issues on your application; resolve any overlap of science and effort
- If low score or unscored: evaluate the reviewers' comments; speak with your Program Official; prepare resubmission and work with your GMS



#### Managing Awarded Grants

Work with SR-PD and Finance on post-award management of your grant:

- Review the award documents
- Note scientific reporting requirements and other terms and conditions
- Follow funding restrictions/requirements
- Work with SR-PD and Finance if you need to revise your budget and if approval is required by sponsor
- Brief your mentor and lab administrator and keep them informed of your award and progress

All financial reporting is handled by University Finance department.



#### Award Management Contacts

- Pre-Award Issues x7791
- Post-Award Issues
  - Cindy Fuqua x8055 at SR-PD
  - Research Administration x8308 at Finance



#### Helpful References

- Sponsored Research and Program Development <a href="http://www.rockefeller.edu/sr-pd/index.php?page=index">http://www.rockefeller.edu/sr-pd/index.php?page=index</a>
- New Investigators http://grants.nih.gov/grants/new\_investigators/
- Center for Scientific Review <u>http://cms.csr.nih.gov/ResourcesforApplicants/</u>
- NIH "Writing Your Application" <a href="http://grants.nih.gov/grants/writing\_application.htm">http://grants.nih.gov/grants/writing\_application.htm</a>
- InfoEd https://spas.rockefeller.edu/login.asp
- "Research Proposals: A Guide to Success"m 3<sup>rd</sup> Edition
- "Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty", 2<sup>nd</sup> Edition

### Questions and Suggestions