Training Grants

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ACRM EARLY CAREER NETWORKING GROUP 2/22/2019

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My Grant Experience

- Pre-doctoral: F31/NRSA from National Institute on Drug Abuse (NIDA), 3 years
- Post-doctoral/Early Career: Merit Switzer Research
 Fellowship from NIDRR now National Institute on
 Disability, Independent Living, and Rehabilitation
 Research (NIDILRR), 1 year + 1 year no cost extension
- Early Career: VA Rehabilitation Research & Development (RR&D), Career Development Award, Level-II, 5 years
- Currently Co-investigator on 2 Department of Defense (DoD) grants

Outline



- Training Grant Mechanism Options
 - o NIH
 - o VA
 - O NIDILHRR
- Preparation for grant writing
- The Career/Training Plan
- The Mentoring Team
- The Mentoring Plan
- Grant Writing Strategies
- Additional Grant Writing Resources
- FYI Advanced Fellowship Opportunities at the VA

NIH Options: K Awards

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- http://grants.nih.gov/training/careerdevelopmentawards.
 http://grants.nih.gov/training/careerdevelopmentawards.
- Always look to the specific NIH institute to see if they accept applications for the mechanism you are interested in first when in doubt, call your program officer!
- Read instructions carefully
- All of the sections of the application must be strong
- Balance how great you are but that you still need support and mentoring to be greater
- Never view a K award as an 'end', always as a means to an end
 your successful independent career
- Critical to make clear that the thrust of the Ro1 proposal you likely would submit by the start of last year (up to 5 years)

K Award Mechanisms

https://researchtraining.nih.gov/programs/career-development

CHECK WITH INSITUTION of INTEREST 1st!

- _____5
- **K99/Roo:** Pathway to Independence Award, 2 stages (up to 5 years): mentored (up to 2 years) and independent (up to 3 years), eligibility = no more than 4 years post-doc experience at time of initial submission, max total amount for Roo phase \$249,000/year, purpose = get you a tenure-track position, *Roo is not automatic, you have to have a faculty offer!*
- Ko1: Mentored Research Scientist Career Development Award, 3-5 years, 75% salary coverage, \$ for studies is institution dependent
- Ko2: Independent Research Scientist Development Award, 3-5 years, 75% salary coverage, \$ for some research related expenses but expected that you already have research support
- **Ko7:** Academic Career Development Award, for both junior and leadership candidates, purpose = enhance education and research at sponsor institution
- Ko8: Mentored Clinical Scientist Research Career Development Award, 3-5 years, 75% salary coverage, \$ for studies institution dependent
- **K12:** Clinical Scientist Institutional Career Development Program Award, purpose = institutional award to prepare clinicians with a commitment to independent research and facilitate them getting a Ko8 or K23
- **K18:** Research Career Enhancement Award for Established Investigators, full or part-time support, purpose = for experienced scientists to acquire new skills or transition their research
- **K22:** Career Transition Award, 1 or 2 phases: mentored (Phase 1), independent research at extramural institution (Phase 2).
- **K23:** Mentored Patient-Oriented Research Career Development Award, eligibility = clinical doctoral degree, focus on patient-oriented research.
- K25: Mentored Quantitative Research Career Development Award, purpose = for people in quantitative science/engineering to do NIH-relevant research
- K24: Mid-Career Investigator Award in Patient-Oriented Research, 25-50% protected time for research and mentoring, eligibility = have an active R01
- Ko5: Senior Research Scientist Award, eligibility = independent funding already

NIH Options: K Awards continued...

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- Specific Aims 1 page
 - Differences of opinion on whether to include career development aims as well as research aims but research should predominate
- First 3 items of Candidate Information and Research Strategy 12 pages
 - Candidates Background, Career Goals and Objectives, Career Development Training Activities During the Award Period
- Training in Responsible Conduct of Research 1 page
- Statements by Mentor, Co-Mentor, Consultants, Contributors 6 pages
- Description of Institutional Environment 1 page
- Institutional Commitment to Candidate's Research Career Development
 4 pages
- Biographical Sketch new formatting!!!!

NIH "bonuses" to keep in mind...

- New Investigator = no previous Ro1, about a 5 point bonus
 - o If you are a Co-PI on a funded Ro1 you are no longer eligible
 - o If you are the PI of an R21 you are still eligible
- Early Stage Investigator = within 10 years of your terminal degree, not clear the exact #pts the bonus is

VA Options: CDA



- VA Office of Research and Development Services:
 - RR&D = Rehabilitation Research & Development
 - BLR&D = Biomedical Laboratory Research & Development
 - CSR&D = Clinical Sciences Research & Development
 - O HSR&D = Health Services Research & Development
- CDA = Career Development Award
 - Specific Aims, Career Plan (includes training plan), Mentoring Plan, Research Plan
- CDA-I: 2 years, salary only
- CDA-II: 5 years, salary + \$65,000/year for study expenses

NIDILRR Options: Mary Switzer Research Fellowships

- Formerly known as NIDRR part of Dept of Education: http://www2.ed.gov/programs/resfel/index.html
- Now NIDILRR part of US Dept of HHS: http://www.acl.gov/Programs/NIDILRR/Grant-Funding/Programs/resfel/awards.aspx
- Completely discretionary
- Grant comes directly to YOU not your institution YOU will pay income tax on this
- Award Amount = \$75,000
- Award Period = 1 year with option for no cost extension for an additional year
- Research area must be in line with the Rehabilitation Act of 1973.
- ❖ Distinguished Fellowship, eligibility = 7 or more years of research experience in the subject area, methods or techniques directly relevant to rehabilitation research
- ❖ Merit Fellowship, mentored, eligibility = doctorate or other terminal degree

Get ready, get set, write!



- If you have initial questions about eligibility or fit contact your program officer.
- Once you have an fleshed out idea and specific aims page email that to a program officer and request a time to talk on the phone.
- Get a good idea about the institute and study section you want your grant to go to → start to think about a cover letter
- Ask colleagues to share successful submissions (or successful sections of submissions).
- Consult The Grant Application Writer's Workbook by Stephen W. Russell & David C Morrison – especially for NIH proposals:

http://www.grantcentral.com/workbooks/national-institutes-of-health/

NIH Reporter

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http://projectreporter.nih.gov/reporter.cfm

NIH RePORTER CHECK OUT FEDERAL RePORTER Version: 7.3.0	About RePORTER FAQ DATA	ExPORTER RePORTER Manual	RSS of Newly Added Projects
QUERY BROWSE NIH MATCHMAKER BETA			
SUBMIT QUERY CLEAR QUERY	Fiscal Year (FY): 02 Current FY is 2015	Active Projects	SELECT
RESEARCHER AND ORGANIZATION			
Principal Investigator (PI) / 2 , Project Leader: (Last Name, First Name) Use '%' for wildcard in PI names	City: 🕗	Use '%' for wildcard	
Enter several PI/Project Leader names OR PI Profile IDs	State: (2)		SELECT
Organization: O	Country: (2)		SELECT
Please enter at least 3 characters to use Lookup. ● Contains ○ Begins with ○ Exact	Congressional District: (2)		SELECT
Department: SELECT	DUNS Number:		
Organization Type: 2 SELECT			
TEXT SEARCH			
Text Search (Logic): And Or Advanced	Search in ② Limit Project search ✓ Projects ☐ Project Title ☐ Publications ☐ Project Terms ☐ News ☐ Project Abstract	Start Year 2014 V	
PROJECT DETAILS Project Number/ Application ID: Format: 5R01CA012345-04/ 8515397 Use '%' for wildcard in project number, e.g. %R21% Enter multiple project numbers/application IDs	Agency/Institute/Center: ② ☑ Admin ☐ Funding NIH Spending Category: ②		SELECT SELECT
OR	Funding Mechanism: Award Type:		SELECT

The Career/Training Plan



- Keep it organized!
- A picture says a 1,000 words
- Be detailed and specific
 - What workshops/courses/seminars you plan to go to?
 - When will they be and will this correspond with relevant aims of your research plan?
 - Will these workshops/courses/seminars even fit in with your budget?
- Integrate this section with all other sections of the grant.
 - Will certain mentors guide you on certain topic areas where you plan to expand your knowledge and expertise?
- End goal of this grant is to set you up for the next step!

VA RR&D CDA-II Career Plan Example



Figure 10. Candidate Goals and Components

- Patient & Rehab Outcomes relevant to addiction and TBI
- Neuroimaging Design & Analysis
- Neurotherapeutic Interventions

Mentor Team Research Products

- First and co-authored manuscripts with mentors & consultants
- Research oral & poster presentations at scientific meetings

Psychometrics

- Statistics
- Neuroimaging
- Neuroanatomy & Plasticity
- Clinical Trials
- TMS
- Rehabiliation Outcomes

Training Funding

Candiate's Long-Term Goal

- CDA II
- NIH R21 for TMS
- VA IIR for Neuroimaging & TMS treatment in Veterans

VA RR&D CDA-II Career Plan Example

Year 1 2 3 4 5 Research Plan (Sec 2a) Aim I Mentoring Team Patient & Rehab Outcomes Team: Pape,					
(Sec 2a) Aim II Aim III					
Aim III					
Mentoring Team Patient & Rehab Outcomes Team: Pane					
(Sec 2c) Jordan, Chambers, Mallinson, Cobia, Sander & Li					
Neuroimaging Design & Analysis Team: Pape, Parrish, Wang, Kapur, & Li					
Neurotherapeutic Intervention Team: Pa Kartje, Chambers, Rao, Sander & Li	ipe,				
Training Activities Grant & Scientific Writing, Statistics, rTMS Psychometrics, Rehab Outcomes					
Neuroimaging, Neuroanatomy					
TBI, Substance Abuse, General Neuroscience	TBI, Substance Abuse, General Neuroscience				
Research Products Aim I Manuscript(s) Aim II Manuscript Manuscript Manuscript(s)					
Oral Presentations and Posters at local, national, and international scientific meetings.	Oral Presentations and Posters at local, national, and international scientific meetings.				
Funding Support Apply for NIH R21Grant					
Apply for VA Merit & Pilot Gran	its				

VA RR&D CDA-II Training Plan Example

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Go to Career Plan Word Doc – Table 9

The Mentoring Team



- Who do you chose?
- How big is too big?
 - o Don't pick so many good people that there's no one left to review your grant!
- Letters of Support
 - Ask well in advance
 - Offer to draft the letter for your mentor
- Topics to include in Letter of Support
 - The expertise of the person and why they are qualified to contribute to your mentoring team (supplemented by Biosketch)
 - Narrative of how they know you and how you've demonstrated to them that you are a great candidate (i.e., have great potential to be a successful independent investigator)
 - ★ Highlight co-authored publications together could even be poster presentations.
 - o Specifically what they will do to help your project and you be better.
 - Define their role in the project
 - × Expertise
 - × Access to resource
 - × % effort

The Mentoring Plan Example



- I had 12 mentors/consultants!!
- Strategy:
 - Organize into teams for each Aim
 - o Primary mentor's support letter specifically addressed this
- See/show example from Word doc

Common Critiques for Early Career Investigators



- Overly ambitious: need to propose work that can realistically be completed within the project time frame
- Specific aims are too interdependent, "house of cards"

Strategy for Addressing Critiques

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See Additional Powerpoint Document

General Strategies for Grant Success



- State the rationale clearly
- Present thorough and accurate literature review
- Include power analysis
- Publish regularly in high quality journals
- Be organized!
- Never assume reviewers know what you mean
- New Biosketch create a cohesive story with your contributions to science
- Ask others to review your application
 - Within you lab
 - Within your department
 - Outside of your field

Grant Writing Resources



- Professional organization meetings may hold grant writing workshops (e.g., Research Society on Alcoholism).
 - These can be great because they are more tailored to a specific NIH institute
- Training in Grantsmanship for Rehabilitation Research, 1 week course at UNC: http://tigrr.bme.unc.edu/
- Grant Writers' Seminars & Workshops, LLC: http://www.grantcentral.com/workshops/

Fellowship Options at the VA



- Office of Acadmic Affiliations: Advanced Fellowships and Professional Development, http://www.va.gov/oaa/specialfellows/
- Addiction Treatment
- Advanced Geriatrics
- Geriatric Neurology
- Polytrauma/TBI
- Health Services Research and Development
- Medical Informatics
- Mental Illness Research & Treatment
- Parkinson's Disease
- Etc...

Questions????

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Can always e-mail questions to: Amy.Herrold@va.gov

