Career Stage Planning: Early Stage Investigator

Moving from Postdoc to Junior Faculty

NIDA Career Workshop

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Bearing Career Transition & Advancement in Mind – Planning Early!!

- Understand hurdles for a timely transition:
  - ✓ Bridge the “K-cliff” by secured funding or collaboration
  - ✓ Expect different review criteria for R01 vs. Ks application
- Plan NOW for a smooth transition (> 6-9 months is likely **insufficient**):
  - ✓ Learn exit options & different career track
  - ✓ Determine timeline, milestones for next stage

Strategies to Secure NIH Funding

- Build up your vision, long-term interest, direction and expertise
- Build track record for R01 application (pilot data; publication …)
- Sharpen skillset for successful grant writing:
  - ✓ A research application is reviewed differently from a training application
  - ✓ Volunteer for NIH CSR Early Career Reviewer Program
  - ✓ Take advantage of any mock review opportunities
- Show evidence of independence
  - ✓ By publication
  - ✓ By including a plan of separation from your current mentor
- Leverage resources in supporting navigation:
  - ✓ Mentorship is essential
  - ✓ Establish network and identify potential collaborators
  - ✓ Active collaboration – play roles in a R01 type project in case yours isn't funded timely

Blending Self-Interest with Funding Agency's Priority

Advancing addiction science by supporting scientific research on drug use and its consequences

Div. of Neuroscience & Behavior Research Themes:

- Advance the understanding of the genetic, chemical, neurobiological and behavioral mechanisms of drugs of abuse and their long-term consequences.
- Neurobiological bases of reward and the behaviors that characterize the cycle of addiction

Div. of Therapeutics & Medical Consequences:

- New medications and devices to treat SUD & related conditions;
- Innovative pharmacological and non-pharmacological approaches;
- Valid & reliable outcome measures for clinical trials;

Div. of Epidemiology, Services & Prevention Research Seeks Solutions:

- What personal and environmental influences contribute to substance use patterns?
- How does technology contribute to substance use and addiction?
- How can we get more large systems of care to adopt evidence based interventions?
- How can we promote population neuroscience?
- How can we minimize the risk of addiction to opioid analgesics among people suffering from pain?
- How can we better promote evidence-based screening and treatment of HIV related to drug use?

AIDS Research Program

Supports high priority research at the intersection HIV/AIDS and substance use disorders

~ 25% NIDA budget

High Priority Topics for a Funding Agency: Why It Matters?

Announcement	NIDA High Priority Topics -- Notice of Special Interest
NOT-DA-20-006	Mentored Career Development Award in Large-Scale Clinical Study Development & Analysis
NOT-DA-20-046	Neuroimmune Signaling and Function in Substance Use Disorders
NOT-DA-20-017	Harnessing computational tools for sophisticated analyses of Substance Use Disorder-related behaviors
NOT-DA-20-012	Biomarkers and Biotypes of Drug Addiction
NOT-DA-20-007	Preclinical and Clinical Studies of the Interactions of Opioids and Stimulants
NOT-DA-19-041	Health Services and Economic Research on the Treatment of Drug, Alcohol, and Tobacco Use Disorders
NOT-DA-19-065	Public Health Research on Cannabis
NOT-DA-20-039	Effects of Cannabis Use and Cannabinoids on the Developing Brain

Sharpen Skillset for Successful Grant Writing: Different Expectation & Criteria

Career Development Awards Protected time for additional lift/skillset	Research Grants Address impactful questions
Candidate	Investigator(s)
Mentor(s), Co-Mentor(s), Consultant(s), Collaborator(s)	Innovation
Career Development Plan/Career Goals & Objectives	Significance Will significantly advance science in a particular field?
Research Plan	Approach
Environment & Institutional Commitment	Environment

Research Plan

Mentored Career Development Awards

	K01	K08	K23	K99
Purpose	Individuals with doctoral degree; supervised career development in biomedical, behavioral, or clinical sciences leading to research independence	individuals with clinical doctoral degree; supervised career development in biomedical and behavioral research, including translational research	individuals with clinical doctoral degree; supervised career development focused on patient-oriented research	facilitate a timely transition from a mentored postdoctoral research to an independent (faculty) research position and independent research support
Budget	salary research expenses, travel, statistics			K99: $90K plus research expenses R00: $249K total costs
Project Period	3-5 years	3-5 years	3-5 years	K99: 2 years R00: 3 years
Renewable	no	no	no	no
Foreign Inst	no	no	no	no
Eligibility	citizen; non-citizen national; permanent resident			… plus visa for K99 and/or R00 phases
Other	never had major grant: e.g. R01, P01, sub-projects			4 years postdoc

Research Project Grants **

	R01	R03	R21	R15
Purpose	discrete, specified, circumscribed research projects builds on current knowledge	small research projects, including pilot and feasibility studies; secondary analysis of existing data; development of research methodology and new technology	exploratory and developmental research projects in early and conceptual stages; may involve some risk but may lead to breakthrough in field or other methods or technical developments with major impact on field	small-scale research projects to expose students to meritorious research projects and strengthen the institution research environment; institution not major recipient of NIH funding
Budget	as appropriate	$50K/year	$275K/entire	$300/entire
Project Period	5 Years	2 years	2 years	3 years
Renewable	yes	no	no	yes
NI/ESI Status	yes	no	no	no
Foreign Inst	yes	yes	yes	no

** The nature of study, not the size of budget, should guide the decision for one mechanism vs. the other

Unique Funding Opportunities for NIDA Early Investigators

Science Track Award for Research Transition [START]

	A/START [AIDS]	B/START [Behavior]	C/START [Chemistry]	I/START [Imaging]
FOA	PA-18-916 (R03)	PAR-19-310 [R03]	PAR-16-383 [R03]	PAR-18-918 [R03]
Targeting PI	New PI (R-s) & ESI	New & established	ESI & New	New & established
Purpose	Facilitate the entry of ESI and newly independent to the area of HIV/AIDS x SUDs	Seed $ for innovative hypotheses, models, & methods in clinical and preclinical cognitive, affective, behavioral research on SUD	Support small scale, innovative chemical & pharmacological pilot research projects	Enable entry into neuroimaging field & to conduct small "proof of concept" studies on SUD
Innovation	No special need	Needs to highlight	Yes	Standard
Direct cost	100K/ year /2 years	75K/ for 1 year	50K/year/2 years	150K/ for 1 year
Pilot data	Beneficial	Optional	Optional	Optional
Due dates	Standard dates	Standard dates	Standard dates	Standard dates

NIDA Highly Competitive Opportunities for Well-prepared Mind

	Avenir	CEBRA
FOA	PAR-DA-20-224 (DP2)	PAR-18-437 (R21)
Targeting PI	Early stage investigator (HIV/AIDS)	All PI
Purpose	Reduce HIV incidence & comorbidity; improve HIV therapies; eradicating HIV	To foster high risk, high impact, highly innovative & conceptually creative research in addiction science
Nexus w/ SUD	Must clearly describe	Must clearly describe
Highly Innovative	High-risk, High-reward	Yes
Direct cost	300,000/ year	275,000/ 2 years
Detailed res. plan	No need	Yes
Preliminary data	Not required	Not required
Funding periods	5 years	2 years
Next due date	Nov 13, 2019	Feb. 11, 2020

NIH Director's Awards Designated to Early Investigators

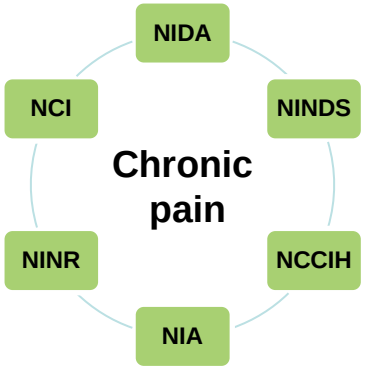
	New Innovator Award	Early Independence Award
FOA	RFA-RM-20-012 (DP2)	RFA-RM-20-014 (DP5)
Targeting PI	Early stage investigator	Postdoctoral researcher
Purpose	Supports exceptionally creative early career investigators	Supports outstanding junior postdoc; Eligibility time window: 1) within 15 months of doctoral degree or the ending of clinical training at the time of application; 2) No more than 12 months tenure as a postdoctoral fellow
Uniqueness	No Specific Aims, rather write essay of proposed research	Bypass traditional postdoctoral training; Have established a track record of scientific innovation and productivity
Highly Innovative	High-risk, High-reward	Yes; High-risk, High-reward
Direct cost/ Funding periods	1.5M/ 5 years	250,000/ year for up to 5 years
Research plan	No need	Need detailed research plan
pilot data	Not required	Not required

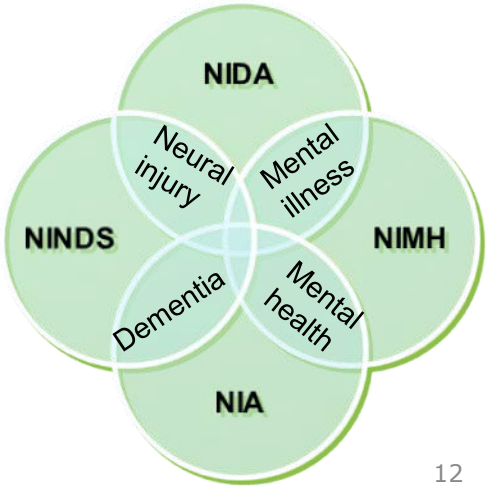
Honing Expertise to Diversify Grant Support

- Vision and strategy to obtain multiple grants from one or different funding agencies:
  - ✓ Learn about multiple funding agencies' mission and priorities
  - ✓ Expand expertise to address interest shared by multiple NIH ICs & beyond (NSF, private agencies)

Examples:

- Mechanistic study: inflammation, neuroimmune interactions
- Systems biology/medicine
- Degenerative diseases, pain research
- Big data / Computational neuroscience
- Project/supplement fund from NIH OD





Have You Talked to a NIH/NIDA PO Lately?

- About a smooth transition and strategy to secure research funding
  - ✓ Strategy to separation from your prior mentor
  - ✓ Networking for active collaboration
- About other challenges even after a junior faculty position is secured:
  - ✓ For the promotion from tenure-track to tenure -- recruit faculty mentors for advice and review progress
  - ✓ For the competing continuation, a renewal of your first R01 – often underestimated

Moving from Postdoc to Junior Faculty

Plan for transition NOW
with exit strategy:

- Build track record (pilot data, publication …)
- Demonstrate independence
- Establish active collaboration

Tips on successful grant writing:

- Be well prepared, early
- Blend PI interest with funding agency's
- Sell your vision, plan, career goal
- Write with reviewer in mind
- A good mentor is essential/crucial

Fellowship Awards

Mentored Ks Awards

A,C /START (2 yrs R03)

B, I /START (1 yr R03)

NIH New Innovator Award

NIH Early Independence Award

NIDA Avenir Award (DP2)

NIDA CEBRA Award (R21)

R01 equivalent

Secure R01 grant(s) and Tenure-track faculty position

Level of challenge, and required innovation with creativity in research