#### **Agenda**

- Welcome REC National Steering Committee
- NIA opportunities Maria Carranza and Jamie Lahvic
- NACC New Investigator Awards Sarah Biber
- Alzheimer's Association opportunities Heather Snyder
- Critical tips when applying for funding REC and PIA Leaders
- Questions and Discussion

# Training and Career Development Programs from the National Institute on Aging

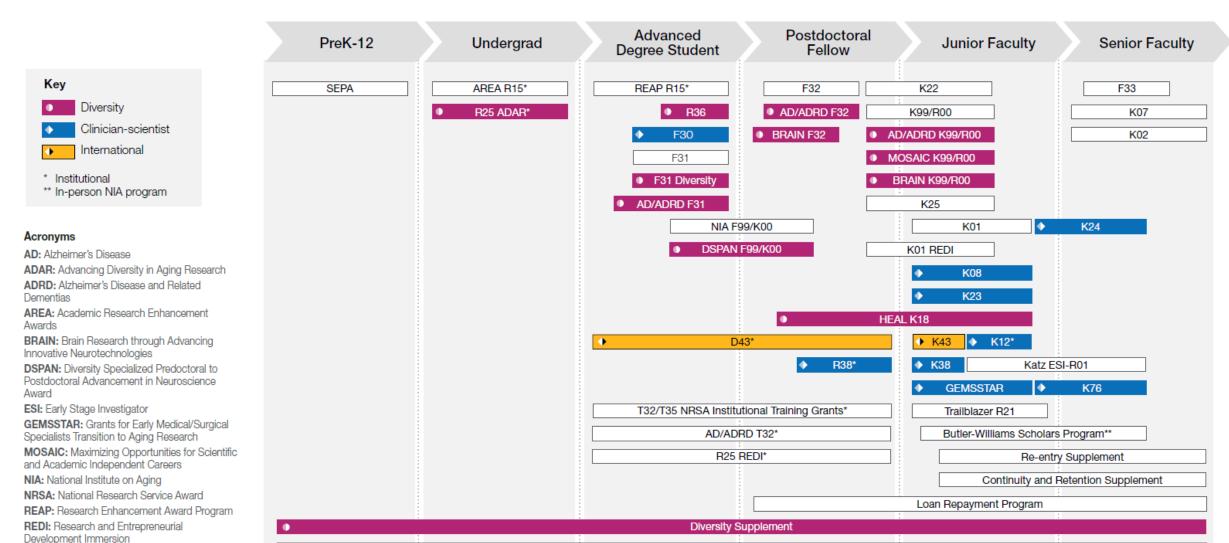
for graduate students, postdocs, and early career faculty

Maria Carranza, Ph.D., NIA Training Officer Jamie Lahvic, Ph.D., Program Officer





### NIA Training and Career Development Landscape



SEPA: Science Education Partnership Award

R25 Course Development Awards\*

### Keep in Touch with NIA Training staff!



Maria Carranza, Ph.D.

NIA Training Officer



Jamie Lahvic, Ph.D. Program Officer

**NIA Training Website** 

Sign up for the NIA
Training Newsletter!

NIATraining@mail.nih.gov





## NIA Fellowship (and similar) Awards

for graduate students & postdocs





## NIA Fellowship (and similar) Awards

- Award comes to you via your mentor
- Stipend, tuition, institutional allowance
- Most have 3 due dates per year

Pan-NIH Fellowships:

F30

Dual-degree students

F31
PhD Students

- F31 Diversity
- F31 ADRD
   Diversity

F32

**Postdocs** 

• F32 ADRD Diversity

NIA - Specific Awards:

**R36** 

Dissertation Award

F99

Predoc/Postdoc
Transition





R36

Dissertation

Award

# R36 Aging Research Dissertation Awards to Increase Diversity

- 1-2 year award to finish dissertation
- Stipend + \$20,000 research funding
- For grad students from groups <u>underrepresented in biomedical sciences</u>



Research project <u>payline</u>, different from fellowships payline, especially for non-Alzheimer's Disease projects





# F99 Predoc/Postdoc Transition

# Transition to Aging Research for Predoctoral Students

- Up to 2 years to finish dissertation, up to 4 years postdoctoral support
- Helpful to identify target postdoctoral lab
- Dissertation phase doesn't have to be in aging research!



1 due date per year, in October





# NIA-Specific Awards to Promote Diversity in Translational Research for Alzheimer's Disease and Related Dementias

For applicants from groups <u>underrepresented in biomedical sciences</u>



Research topics focused on drug discovery or data science research in AD/ADRD

F31

ADRD Diversity
PhD students

F32
ADRD Diversity
Postdocs

K99
ADRD Diversity
Postdocs





## NIA Mentored Career Development Awards

for postdocs & early career faculty





#### Mentored Career Development Awards (K)

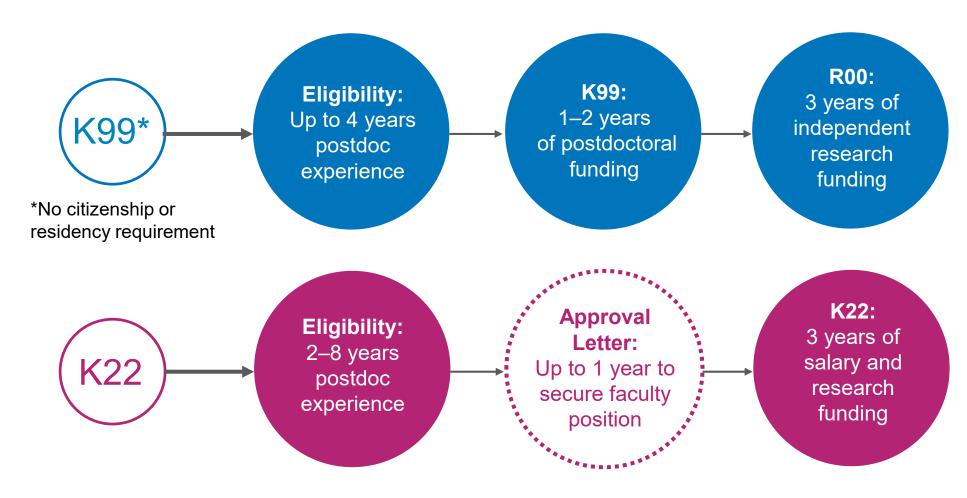
Career Transition Awards	K99	Pathway to Independence Award	
	K22	Career Transition Award	
Career Development Awards	K01	Mentored Research Scientist Development Award	
	K08	Mentored Clinical Scientist Research Career Development Award, Translational and Clinical Research	
	K18	HEAL Initiative: Translational Science Career Enhancement Award, for translational researchers working on pain therapies	
	K25	Mentored Quantitative Research Development Award, open to quantitative scientists without prior wet lab research background	
	K23	Mentored Patient-Oriented Research Career Development Award	
	K76	Paul Beeson Emerging Leaders Career Development Award in Aging	





#### **NIA Career Transition Awards**

For postdocs preparing to become faculty



### K99 and K22 opportunities supported by NIA

Award	Name	Discipline	Funding Opportunity Announcements
Parent K99/R00	NIH Pathway to Independence Award	All aging research	PA-20-187 PA-20-188 PA-20-189
AD/ADRD K99/R00	Advanced Postdoctoral Career Transition Awards to Promote Diversity in Translational Research for AD/ADRD	Drug discovery or data science research in AD/ADRD	PAR-21-220
MOSAIC K99/R00	Maximizing Opportunities for Scientific and Academic Independent Careers Award to Promote Diversity	All aging research	PAR-21-271 PAR-21-272 PAR-21-273
BRAIN K99/R00	BRAIN Initiative Advanced Postdoctoral Career Transition Award to Promote Diversity	BRAIN Initiative research areas	RFA-NS-19-043 RFA-NS-19-044
NINDS AD/ADRD K99/R00	NINDS AD/ADRD Advanced Postdoctoral Career Transition Award to Promote Diversity	NINDS AD/ADRD priorities	PAR-22-022
NIA K22	NIA Career Transition Award	All aging research	PAR-21-351

#### Mentored Career Development Awards

K01

K08

K18

**K23** 

K25

- For junior faculty seeking continued mentorship
- Salary: \$75k-100k; Research: \$20k-40k
- Can apply to many as a postdoc, may require faculty position by time of award

# K76: Paul B. Beeson Emerging Leaders Career Development Award in Aging

K76

- For junior to mid-career faculty who have leadership experience and faculty-level research support
- Budget: Direct cost limit: \$225,000 per year covering salary and research support





# Early-Stage Investigator Funding and Programs

for early career faculty





#### New Investigators and Early Stage Investigators

#### Early Stage Investigator (ESI)

- Has NOT received R01 or equivalent
- Completed terminal research degree or clinical training within the past 10 years

Extensions available! For childbirth, medical leave, COVID-19 delays, etc.

#### New Investigator (NI)

 Has NOT received R01 or equivalent

R01-equivalent awards: DP1, DP2, DP5, R01, R37, R56, RF1, RL1, U01 and R35 (select program announcements).





#### Why is your status important?

- NIA's pay line has been historically better for NI/ESI
- Example: NIA's Fiscal Year 2022 Pay Lines

CSR-Reviewed Research Applications (Percentile Based)						
	General Pay Line <\$500K	General Pay Line ≥\$500K	AD/ADRD Pay Line			
All (except below)	10%	7%	28%			
New Investigator R01s	13%	10%	31%			
Early Stage Investigator R01s	15%	12%	33%			





R01

# Stephen I. Katz Early Stage Investigator Research Project Grant

- Early Stage Investigator status required
- Innovative project, change in research direction
- No preliminary data allowed



Your application will be withdrawn if you include preliminary data!





### Research Mechanisms for Early Career Faculty

## Research Project Grants

- Standard 5-year award; no budget limit but need to reflect the actual needs of the proposed project
- Advanced/established independent work

## Exploratory/Developmental Grants

- High risk, high reward 2-year award; \$200K direct costs per year
- No preliminary data required (but may include)

#### <u>R03</u> Small Research Grants

- \$50-100K direct costs per year for up to two years
- Pilot research that is likely to lead to a subsequent individual R01

#### R15/R16 Research Enhancement Awards

- \$100-300K direct costs per year for 3-4 years
- Student-focused research; institutions with little NIH funding





# Research and Entrepreneurial Development Immersion (REDI)

Empowering spin-offs is critical to biomedical innovation, the economy, and the mission of NIA. Through the above funding programs, REDI provides bio-entrepreneurship training to further enrich and diversify NIA training programs. REDI-supported trainees will acquire additional nonacademic skills for success, such as science communications; intellectual property; regulatory affairs; science policy; consulting; drug discovery, approval, and production; and the business of science, science education, and health care. **Participants from diverse backgrounds are particularly encouraged.** 

FOA	Due Dates	Budget Limits
RFA-AG-22-227 (REDI: Mentored Entrepreneurial Career Development Award; K01 clinical trial not allowed)	October 18, 2023	\$90,000/year in salary; \$50,000/year in other program-related expenses
RFA-AG-22-226 (REDI: Entrepreneurship Enhancement Award; R25 clinical trial not allowed)	October 18, 2023	\$250,000/year in direct costs
RFA-AG-23-029 (REDI: Entrepreneurial Small Business Transition Award; SBIR clinical trial optional)	Application: February 17, 2023 Letter of Intent: January 17, 2023	Phase I \$400,000; Fast-Track \$2 million
RFA-AG-23-030 (REDI: Entrepreneurial Small Business Transition Award; STTR clinical trial optional)	Application: February 17, 2023 Letter of Intent: January 17, 2023	Phase I \$400,000; Fast-Track \$2 million



## The Butler-Williams Scholars Program

- Highly competitive NIA Training Program for junior faculty and researchers new to the field of aging to gain insight about aging research.
- Emphasis on cohort networking and capacity-building
- Recent Butler-Williams <u>Blog Post</u>



Applications in Spring Program in Summer

Eligibility: Ph.D., DrPH, M.D., DO, etc.

Email: NIABWSP@mail.nih.gov





#### NIA Diversity and Related Supplements

# Diversity Supplements: PA-21-071

• Enhance the diversity of the research workforce by supporting **investigators from underrepresented backgrounds**.

# Re-entry and Re-Integration Supplements: NOT-OD-21-134

• Support individuals with high potential to re-enter or re-integrate into an active research career after an interruption.

# Continuity and Retention Supp: NOT-OD-20-054/055

 Support the transition and retention of investigators to minimize departures from biomedical research workforce during critical life events.





### Ways to Connect with the National Institute on Aging

# Inside A Blog for Researchers

Subscribe to our <u>blog</u> and see our recent posts for Early Career Investigators



Get monthly updates from NIA Training!



Follow us on <u>Twitter</u> for up-to-date NIA research news







# 2022 New Investigator Awards

Highly Competitive: Last year NACC received 51 applications from 29 different ADRCS

#### Meet our 2022 New Investigator Award Winners!



Andrew Yang, PhD University of California, San Francisco ADRC



Yuriko Katsumata, PhD University of Kentucky ADRC



Jaime Ramos-Cejudo, PhD New York University ADRC

- NACC has distributed 51 Collaborative Grants, Junior and New Investigator Awards since 2000
- Awards have ranged from \$50k \$300k over the years
- Current New Investigator Awards are \$135k max





# 2023 New Investigator Awards: Call for Applications!

#### Two awards will be given (\$135k each):

Two tracks to choose from:

- 1. Traditional award: Open to proposals focused on any ADRD-related research topic
- 2. New! DEI-focused award: Open to proposals with a strong DEI or health disparities research focus within ADRD

Application deadline: January 17th, 2023







#### Advancing DEI-Related ADRD Research

#### Potential Future Studies

- Understanding the scientific underpinnings of potential racial and ethnic differences in the pathobiology and clinical phenotype of ADRD
- Examining and addressing why some historically minoritized populations are disproportionately underdiagnosed and affected by ADRD
- Assessing the possible relationship between lifelong social exposures and risk and resilience to ADRD
- Methodologies for diverse participant recruitment





# Who is Eligible for the Award?

- 1. You must be a new investigator. New investigators are defined as post-doctoral fellows, residents, or junior faculty that have not yet been promoted to associate professor rank (MD or PhD), within five years of rank, and not already having had an RO1 grant. Researchers and investigators with a higher or lower academic rank are not eligible to apply.
- 2. New investigators must be affiliated with an ADRC. ADRC Directors must provide a letter on behalf of each new investigator award applicant confirming this affiliation.









Vision: A world without

Alzheimer's disease

and all other dementia.





1-800-272-3900 alz.org

### **Our Research Strategy**

Dynamic, Durable, Multi-dimensional, Multi-faceted



SEED new ideas

SPEED

the development of new therapies



**SCALE** 

to accelerate the science



\$310M+

currently active



950+



countries

## **ALZ Early Career** and New to Field Research Grants

#### PROGRAMS OPEN JANUARY 2023

more info: alz.org/grants

contact: grantsapp@alz.org

Clinician Scientist Fellowship (AACSF)

Clinician Scientist Fellowship to Promote Diversity (AACSF-D)

\$250,000/ up to 3yrs

Research Fellowship (AARF)

Research Fellowship to Promote Diversity (AARF-D)

\$200,000/ up to 3yrs

Research Grant (AARG)

Research Grant to Promote Diversity (AARF-D)

\$200,000/ up to 3yrs

Research Grant New to Field (AARG-NTF)

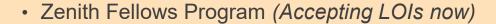
Research Grant New to Field to Promote Diversity (AARG-D-NTF)

\$200,000/ up to 3yrs

# Emerging Areas, Drug Discovery & Clinical Trial Research Grants

more info: alz.org/grants grantsapp@alz.org

#### REQUESTS FOR APPLICATIONS





 Advancing Research on Care and Outcome Measurement 3.0 (ARCOM) (Spring 2023)



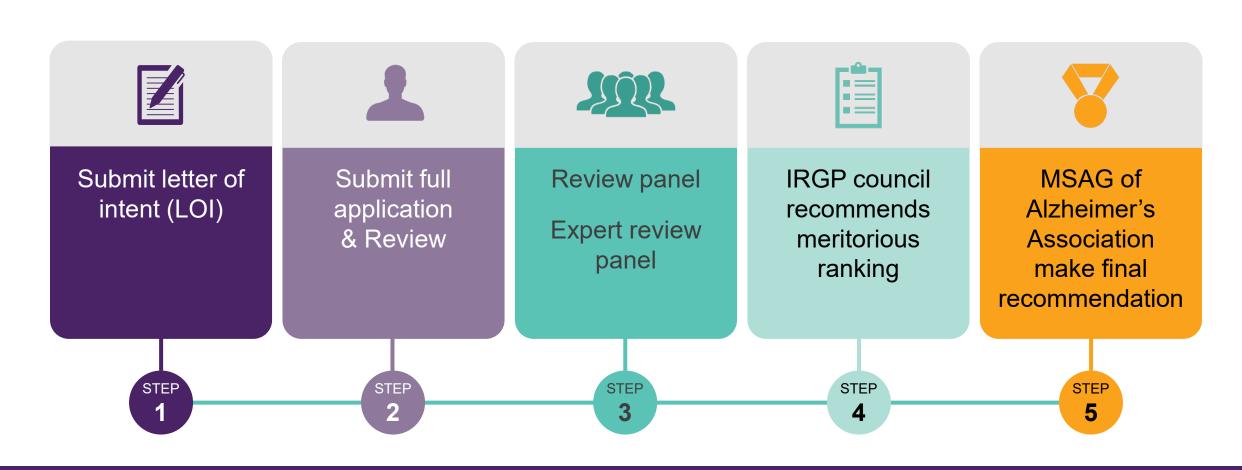
• Sex and Gender in Alzheimer's (January 2023)



- Part the Cloud Translational Research Program for Phase 1 and Phase 2 Clinical Studies (Coming Soon)
- Alzheimer's Association Leveraging Model & Data Resources to Advance Alzheimer's and Dementia Discovery Program (ALZ Discovery) (In Review)
- · And more!



# Funding the Best Research Worldwide Through Peer-Review



# VISIT THE ALZHEIMER'S ASSOCIATION BOOTH IN THE EXHIBIT HALL DURING AAIC FOR MORE INFO or EMAIL GRANTSAPP@ALZ.ORG





alz.org/GRANTS
alz.org/ISTAART
alz.org/AAIC

# Applying for Funding Tips



Note: These tips are based on the presenters' personal opinions and experiences and are not representative of the PIAs or all REC leaders.

# A reviewer to champion your grant

#### You need a great hook

- Why this problem?
- Why now?
- Why haven't others solved this?
- If you succeed, what would it mean for the world?

#### Read the application instructions

- What the funder wants
- Key rules that could disqualify you

#### • Learn the evaluation criteria

- Use headers that match evaluation criteria
- Use sound bites

## Focus on the reviewer journey

- Instead of path
   ATPLMVZ, explain AZ
- Give concrete evidence

#### Be reviewer friendly

- Avoid acronyms
- White space
- Short sentences
- Figures



C. Elizabeth Shaaban, PhD, MS, MPH Assistant Professor of Epidemiology Pitt ADRC REC Scholar PEERs Chair 9@PopNeurosci

## Do's for training grants

- Identify what you would like to be working on in 3-5 years (after this grant).
  - Reverse engineer: for the scientific questions you have, what skills/expertise do you need?
- Build on what you already know
  - Identify areas you are already trained/skilled in vs. training gaps
  - Propose training that will fill your training gaps
- Engage a few experienced mentors with expertise in the training gaps & who can promote your career development
- Integrate the training with the science of this training grant
- Be organized: reverse engineer a timeline; track what you need and have; give yourself a lot of time
- Support the cognitive neuroscience of the reader/reviewer
- Persevere

#### Specific Aims

- Introduce the ideas (and gaps!) that drive each aim
- Make it enjoyable to read (succinct language, white space, balance between setting up expectations and too much detail)
- Seek feedback!
  - ESPECIALLY from colleagues outside your subfield

#### Research Strategy

- Start with an outline what is each paragraph accomplishing?
- Include a figure/conceptual model that conveys your overarching question and how aims fit together
- Analytic approach should clearly flow from conceptual model and language in Aims

#### Recruitment and Retention

Justify your team's potential for making progress

# **Tips for Submitting Grants**

#### DO THIS!

- Start early
- Develop your hypothesis first
- Develop your aims next
- Contact your Program Officer to discuss before submitting
- Include power analysis
- Don't forget sex as a biological variable
- Use bullets

#### **DON'T DO THIS**

- Write your grant at the last minute
- Be too ambitious!
- Make the text so dense that you cause fatigue in your reviewers
- Make your figures too small to read
- Ignore rigor and reproducibility
- Write in past tense less engaging for reviewers to read



# **Tips for Submitting Grants**

Research Education Component

#### DO THIS!

- The single largest driver for my scoring is <u>clarity</u> of the proposal: if I do not understand it, I lose interest
- Many papers cannot be replicated, and do not underestimate the importance of <u>rigor</u>: be careful with sample sizes, opt for randomization, use independent models or cohorts
- Look for <u>more than 1 mentor</u>: you may need 1 mentor (or more) for your science and another for career development
- Talk about what <u>you can bring</u> to the field of AD. If you are coming from a different discipline, explain why your background is going to move this field forward and fill a certain gap

#### DON'T DO THIS

- Do <u>not write more than 2 specific aims</u>.

  For early career applications, reviewers want to make sure you can do the proposed research in the time frame of the grant
- Do not <u>replicate</u> the mentor's research, reviewers appreciate <u>originality</u> and want to see you develop your own ideas
- Do not propose training in areas you are comfortable with or <u>historical</u>. This is an opportunity to learn something <u>new and</u> <u>exciting</u>
- Do not choose a <u>mentor who is not NIH</u>
  <u>funded</u>. Being nice and caring are not
  sufficient qualities to becoming a mentor in a
  career development grant

# **Tips for Submitting Grants**

#### DO THIS!

- Pick an idea you WANT to do!
- Clear your calendar!
- Identify rate limiting steps early (budget, team, letters)
- Limit your time period for feedback
- Write more than one grant
- Improve and re-submit if you don't get it on the first try
- Celebrate your submission!



#### **DON'T DO THIS**

- Write something too big for your first project
- Lose your confidence
- Give up. DO NOT GIVE UP!
   You can do this!

# Questions and Discussion

# Thank you for joining US.





PIA TO ELEVATE EARLY CAREER RESEARCHERS (PEERS)
PROFESSIONAL INTEREST AREA



ALLIANCE OF WOMEN ALZHEIMER'S RESEARCHERS (AWARE)
PROFESSIONAL INTEREST AREA



DIVERSITY AND DISPARITIES PROFESSIONAL INTEREST AREA





