

Diversity-Focused Cancer Research Training Opportunities

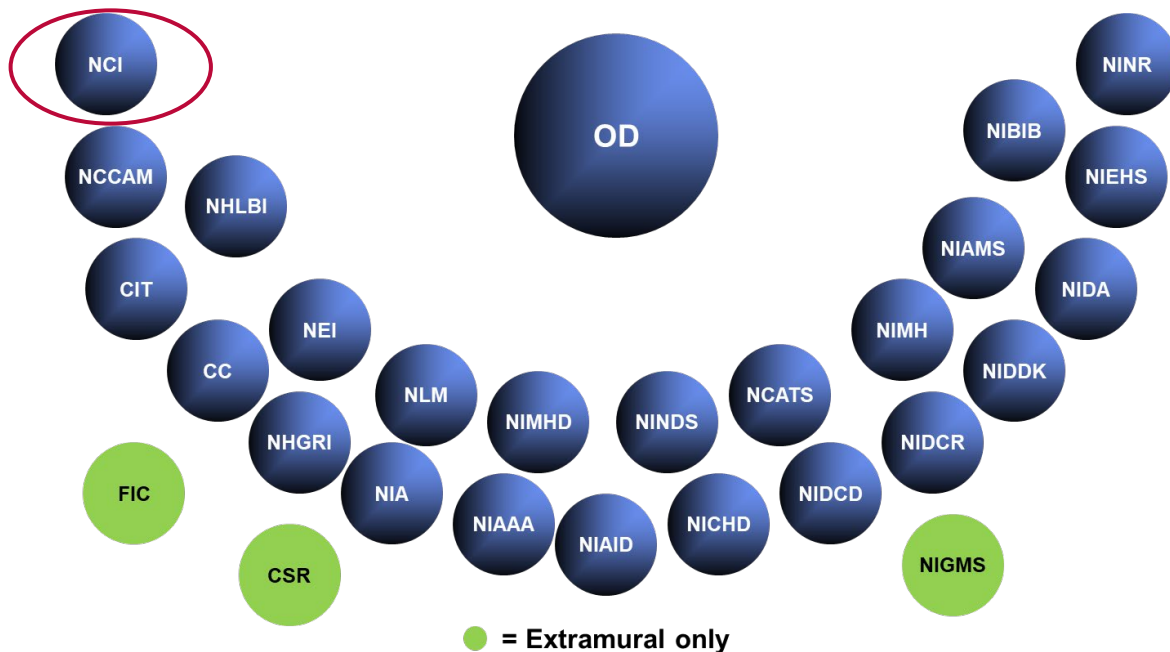
*Center to Reduce Cancer Health Disparities (CRCHD)
National Cancer Institute*

Outline

1. **Overview**
2. *CURE and iCURE*
3. *GMaP*
4. *Questions?*



National Institutes of Health Has 27 Institutes and Centers



National Cancer Institute (NCI)

Website: <https://www.cancer.gov/about-nci>

WHAT WE DO

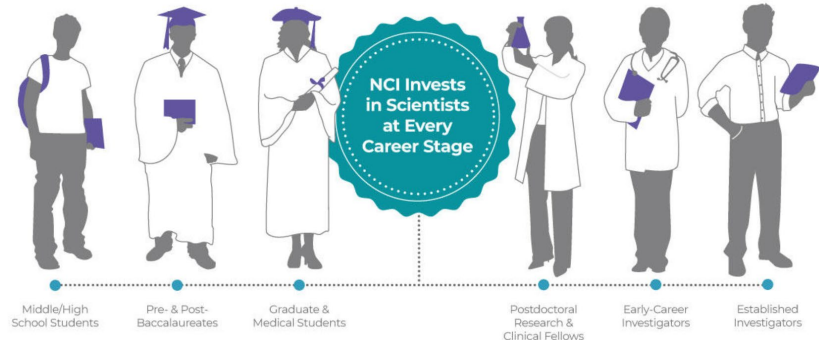
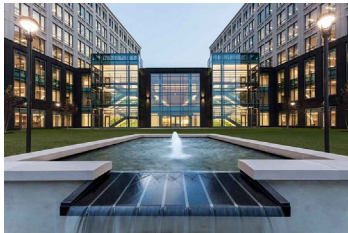


Organization:

- Intramural: conduct research at NCI
- Extramural: support research across the nation

Priorities:

- Research: cancer health disparities; data science; immunotherapy; clinical trials; etc.
- Training



NCI Center to Reduce Cancer Health Disparities (CRCHD)

Diversity Training



Partnerships

- Partnerships to Advance Cancer Health Equity (PACHE)

Cancer Health Disparities Research

- Basic research
- Translational research

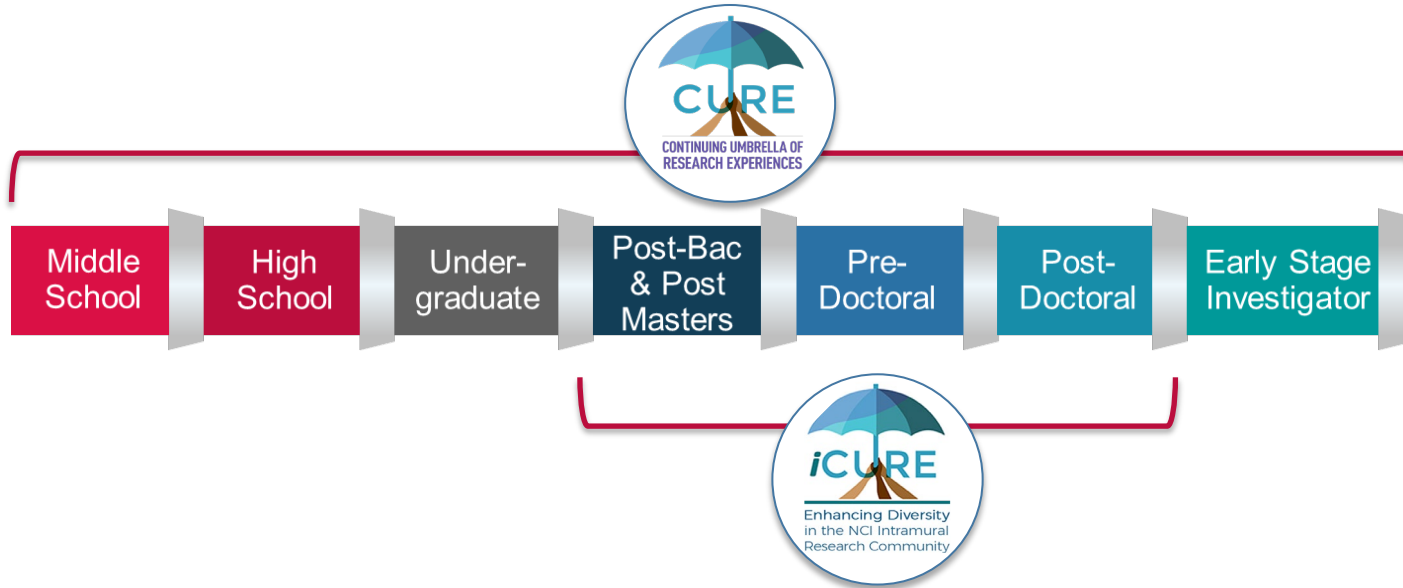
Networks

- Geographic Management of Cancer Health Disparities Program (GMaP)
- National Outreach Network (NON)
- CUSP2CT (RFA-CA-21-057)



NCI Diversity-Focused Training Programs

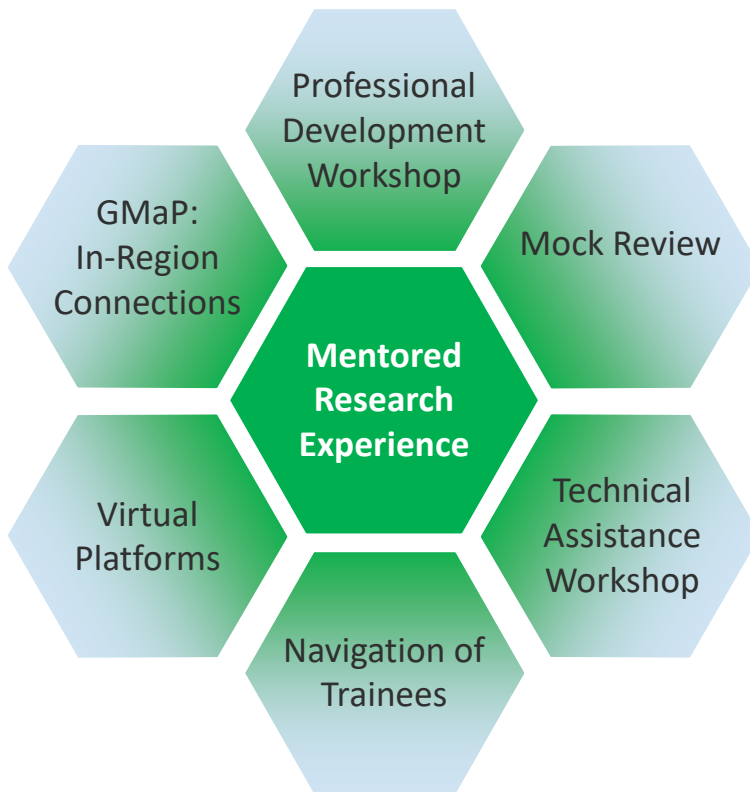
Extramural: Continuing Umbrella of Research Experiences (CURE)



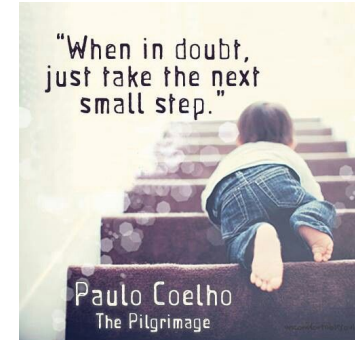
- Support research experiences of **underrepresented** students and scientists
- Promote professional and career development
- Help the trainees achieve research independence

Intramural: Intramural Continuing Umbrella of Research Experiences (iCURE)

More Than a Pipeline: CURE and iCURE Provide an Ecosystem of Support



CURE and iCURE Sets Clear Goals for Career Advancement



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Extramural: Continuing Umbrella of Research Experiences (CURE)



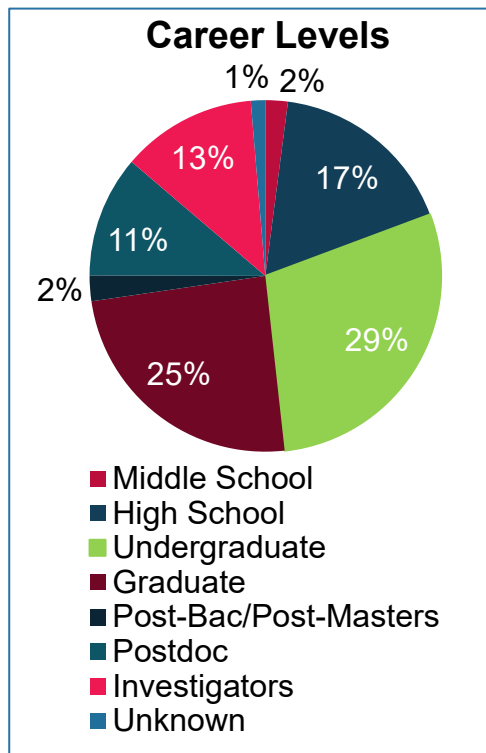
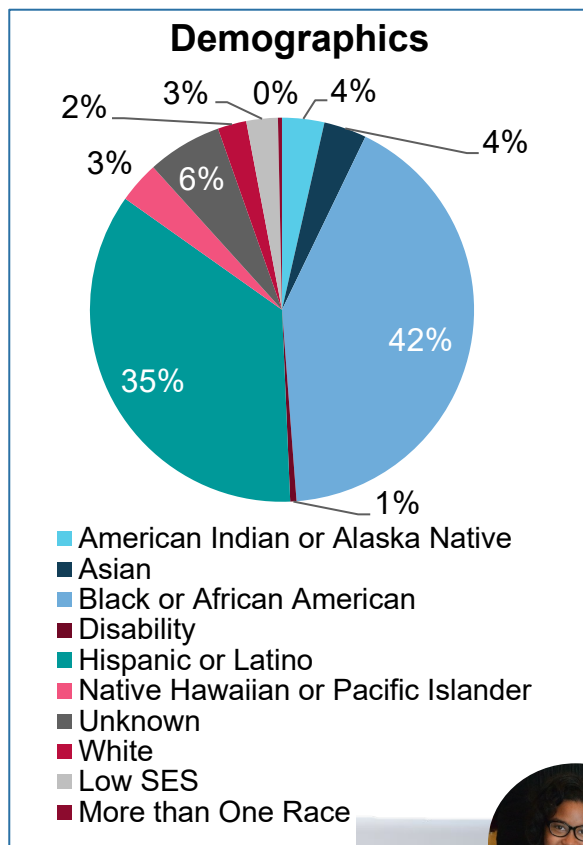
Focused on enhancing diversity: Trainees must be US citizen, non-citizen nationals or permanent resident

Race/Ethnicity

Disability

Disadvantaged
Background

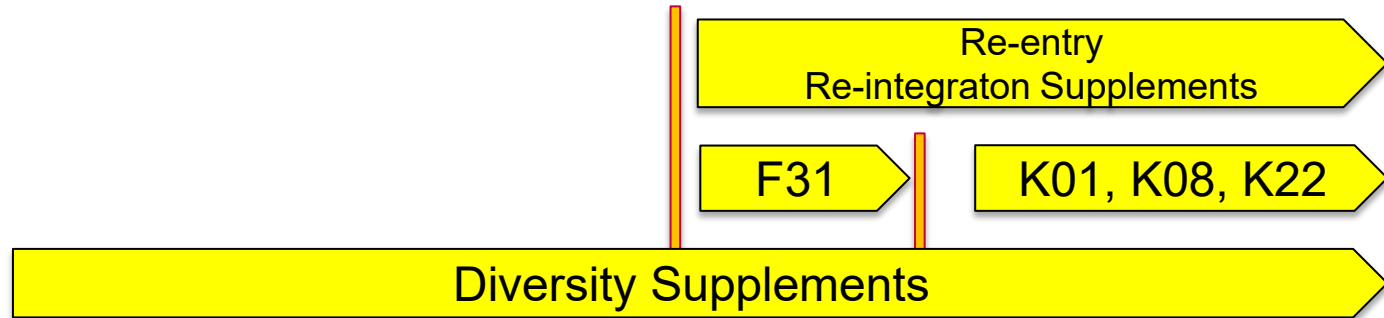
CURE Trainees (2001-2018, n = 4,753) are Diverse



CURE Funding Mechanisms



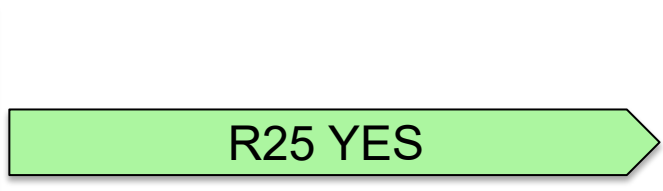
Individual Awards



R
2
1

R
0
1

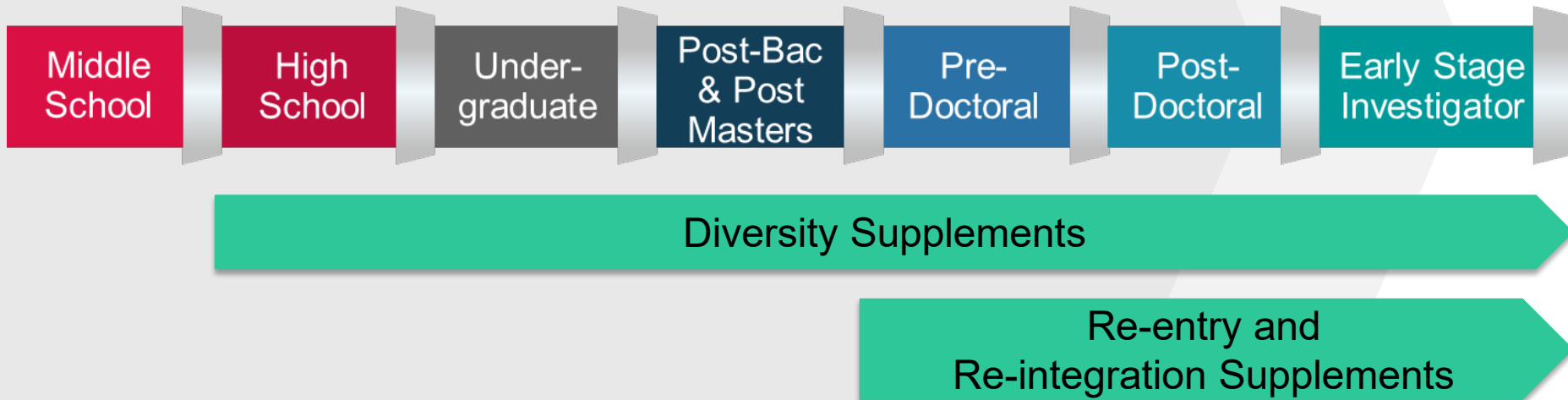
Institutional Awards



Individual Awards



Diversity and Re-entry and Re-integration Supplements



Supplements within the CURE: Diversity and Re-Entry and Re-Integration



- Provide additional funding to currently active NIH grants (parent grants) to support research experiences of trainees → **bridge** toward next career level
- Parent grant must have **at least two years** of active status left at the time of supplement application
- NCI does not accept P30, SC1/2/3 as parent grants for these supplements
- R01 or equivalent – 2 supplements at the same time; R21 or equivalent – 1 supplement at a time to support grad student or more junior
- Application receipt: **Oct 1 – Dec 1** and **Feb 1 – Mar 31**

Contact

Dr. Samson Gebreab

CUREsupplements@nih.gov

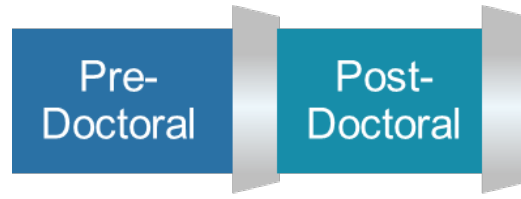


Research Supplements to Promote Diversity in Health-Related Research (PA-21-071, Diversity Supplements)



- Aims to support candidates from underrepresented populations: race/ethnicity, disability, disadvantaged background
- **Allowed one diversity supplement at each career level**
- <https://grants.nih.gov/grants/guide/pa-files/PA-21-071.html>
- Diversity Supplements: <http://www.cancer.gov/about-nci/organization/crchd/diversity-training/cure/DSGuidelines>

Diversity Supplements: Special Eligibility Criteria for Graduate Students and Postdoctoral Fellows



- **No concurrent PHS support for graduate student or postdoctoral fellow candidate at the time of application:**
 - Cannot be supported by parent grant
 - If coming off of institutional training grant, need letter from institution
- **AFTER application submission:**
 - Can be supported by the parent grant at the recipient's own risk, pending funding decision of supplement application

Notice of Special Interest (NOSI): Research Supplements to Promote Re-Entry and Re-integration into Health-Related Research Careers (NOT-OD-21-134, Re-Entry Supplements)

Re-entry supplement:

- Candidate must have been on hiatus from research for 1-8 years; must be postdoctoral fellow or faculty before hiatus



Re-integration supplement:

- Individuals adversely affected by unsafe or discriminatory environments due to unlawful harassment who need to make a rapid transition



- Aims to support candidates from all populations
- Each eligible grant can support only one ReRi supplement at a time
- <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-134.html>
- <https://www.cancer.gov/about-nci/organization/crchd/diversity-training/cure/reentry-supplements-guidelines>

What Do We Look for in a Supplement Application?

Candidate	Mentoring and Career Development Plan	Research Plan
<ul style="list-style-type: none">• Motivation• Accomplishments• Career goals• Eligibility and diversity statement	<ul style="list-style-type: none">• Scientific proficiency and mentoring expertise of mentor(s)• Defined role(s) and commitment of mentor(s)• Training of career skills• Clear benchmarks• Candidate-specific plans	<ul style="list-style-type: none">• Relevancy to Parent Grant project• Scientific impact on Parent Grant project• Research design and feasibility• Alignment with candidate's career goals

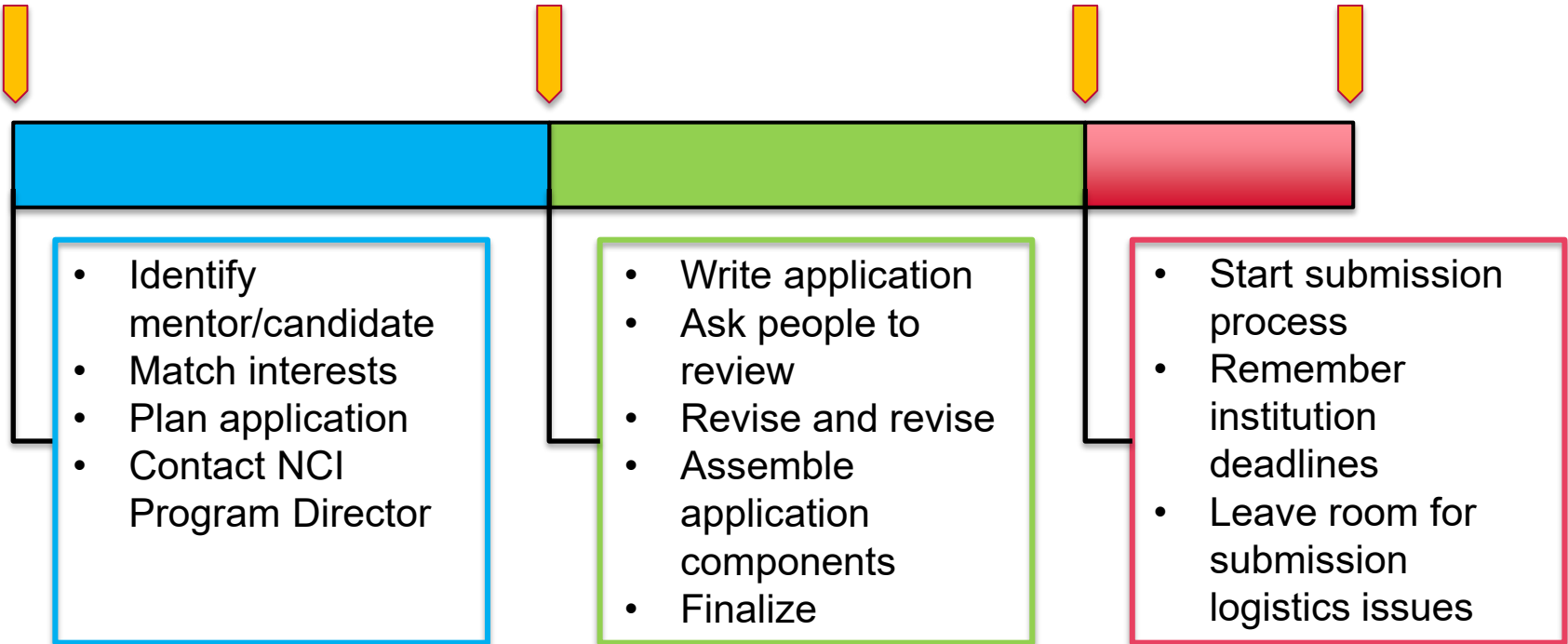
Suggested Timeline for Preparing a Supplement Application

5 Months
Prior

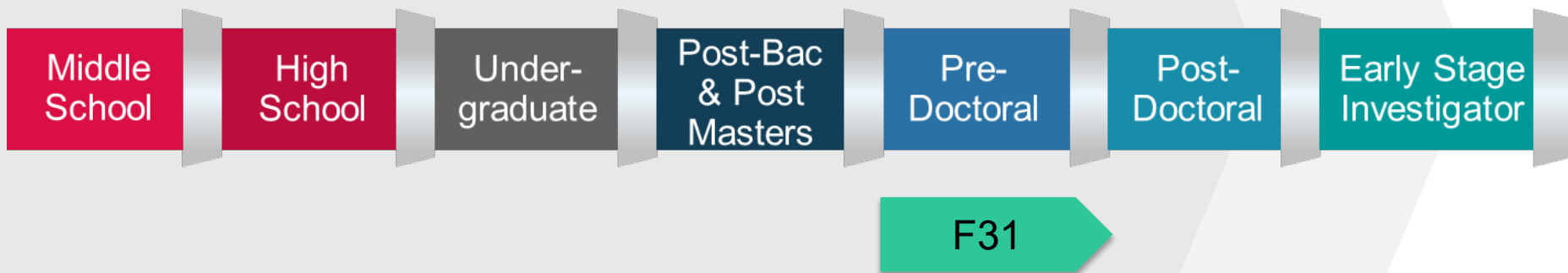
3 Months
Prior

1 Month
Prior

Submission
Deadline



Ruth L. Kirschstein NRSA Individual Predoctoral Fellowship to Promote Diversity in Health- Related Research (F31-Diversity)



F31 Diversity Predoctoral Fellowship ([PA-21-052](#))

- **Objective:** To increase biomedical workforce diversity by supporting mentored research training leading to a PhD or combined dual doctoral degrees.
- **Benefits**
 - Individualized, mentored research training.
 - Experience conducting impactful research as well as presenting and publishing research findings as a first author.
 - Development of a stronger grants skillset which improves competitiveness for NIH funding.
 - **Student is the PI of the F31.**
- Support is provided for up to 5 (Ph.D.) or 6 years (combined degrees, ex.MD/PhD)

F31 Application and Contact

Receipt Cycle	Application Receipt Date	Initial Review	Council Review	Earliest Possible Start Date*
1	April 8	June/July	September/ October	December
2	August 8	October/ November	January/ February	April
3	December 8	February/ March	May/June	July

** Start dates are determined by the availability of NCI funds and may not occur until well after the earliest possible start date.*

Contact

Dr. Anthony DiBello
anthony.dibello@nih.gov



5 Important Elements of an F31 Diversity Application

1. Fellowship Applicant	2. Sponsors, Collaborators, and Consultants	3. Research Training Plan	4. Training Potential	5. Institutional Environment & Commitment to Training
<ul style="list-style-type: none">• Academic record• Research experience• Recommendation letters• Description of candidate's contribution to program goals of promoting diversity	<ul style="list-style-type: none">• Sponsor is active, funded investigator in area of proposed research• Devote time and commitment to trainees' success• History of mentoring success	<ul style="list-style-type: none">• Overall scientific impact• Specific Aims clearly described• Objective, Approach, Innovation, Significance	<ul style="list-style-type: none">• Skills that will enable future independent career• Describe activities that support future career as an independent researcher	<ul style="list-style-type: none">• Explain selection of academic institution• How features of scientific environment will enhance success

Suggested Timeline for Preparing an F31 Diversity Application

8-6 Months
Prior



4-3 Months
Prior



1 Month
Prior



Submission
Deadline



- Notify NCI PD of intent to apply
- Become familiar with the Program Announcement (PA) & instruction requirements
- Work with sponsor to develop 1st draft of application

- Ask grant writing experts to review 2nd draft of application
- Focus on required sections of the F31 application
- Update NCI PD of progress
- Review, Edit, Revise!!

- Final draft of application
- Refer to PA and instructions for submission guidance
- Use institutional resources in submission process



Career Development K Awards to Promote Diversity



**Investigators in tenure-track faculty positions are not eligible*

NCI Career Development Awards (K Awards)

- **Objectives:**

- Provide protected time and salary support for 3-5 years of intensive training and research
- Promote career development activities to enhance candidate's research capabilities
- Expectation is that awardees will be prepared to lead independent research programs and become competitive for NIH research project grants

- **Requirements:**

- An academically strong candidate with prior research experience and publications
- A well-defined research project with scientific impact and structured training activities
- Experienced, committed, & funded mentor/mentoring team (advisory committee for K22)
- Institutional commitment to candidate's career development and 75% protected time

NCI K Awards Supported by CRCHD

Next Submission Date: October 12 / November 12, 2021

K Award	Mentored or Non-Mentored	Research Focus	Salary up to	Max R&D Support	Duration
K01	Mentored	All Cancer-Related Research	\$100k	\$30k	3-5 years
K22	Non-Mentored			\$50k	3 years
K08	Mentored	Clinical, Translational & Patient-Oriented Research	Legislative salary cap	\$50k	3-5 years

Contact

Dr. Mulualem Tilahun

mulualem.tilahun@nih.gov



FOAs: Clinical Trial Allowed vs No Independent Clinical Trials

- Newly Re-issued FOAs

- NCI **Mentored** Research Scientist Development Award to Promote Diversity (K01)

PAR-21-295: <https://grants.nih.gov/grants/guide/pa-files/PAR-21-295.html>

PAR-21-296: <https://grants.nih.gov/grants/guide/pa-files/PAR-21-296.html>

- NCI **Mentored** Clinical Scientist Research Career Development Award to Promote Diversity (K08)

PAR-21-299: <https://grants.nih.gov/grants/guide/pa-files/PAR-21-299.html>

PAR-21-300: <https://grants.nih.gov/grants/guide/pa-files/PAR-21-300.html>

- NCI **Transition** Career Development Award to Promote Diversity (K22)

PAR-21-301: <https://grants.nih.gov/grants/guide/pa-files/PAR-21-301.html>

PAR-21-302: <https://grants.nih.gov/grants/guide/pa-files/PAR-21-302.html>

K Awards Application Receipt Dates

Receipt Cycle	Application Receipt Date (New/ Resubmission)	Initial Review	Council Review	Earliest Possible Start Date*
1	February 12 / March 12	June/July	September/ October	December
2	June 12 / July 12	October/ November	January/ February	April
3	October 12 / November 12	February/ March	May/June	July

** Start dates are determined by the availability of NCI funds and may not occur until well after the earliest possible start date.*

Eligibility Criteria: NCI Diversity K01 and K08

- Research, clinical or health-professional doctoral degree or equivalent
- Clinical doctorate or PhD in clinical disciplines (K08)
- Full-time appointment at an academic institution at the time of the award
- K01: Within 5 years of research training/experience beyond a doctoral degree at the time of submitting a K01 application.
- The K08 award may be used by candidates with different levels of prior research training and at different stages in their mentored career development
- No individual NIH K awards or other pending PHS K applications or peer-reviewed research grants.
- Former PIs of R03, R21, R36, SBIR, or K12/KL2 remain eligible.

Eligibility Criteria: NCI Diversity K22

- Clinical, research doctorate or combined degree
- Affiliation with a domestic extramural or Federal institution at the time of submission or resubmission
- ≤ 8 years of mentored, non-independent postgraduate training after terminal degree/clinical residency at time of application
- No tenure-track faculty position or accepted offer
- Applicants are expected to submit an R01 application by the end of year 2 of the award
- No individual NIH K awards or other pending PHS K applications or peer-reviewed research grants (except R03, R21)

What Do We Look for in a Career Development Application?

Candidate	Career Development and Mentoring Plan	Research Plan
<ul style="list-style-type: none">• Excellent training & research experience• Highly productive (peer-reviewed publication record)• Clear career goals• Eligibility letter	<ul style="list-style-type: none">• Structured career development plan• Matched expertise & strong mentoring track record of mentor(s)• Strong reference letters• Strong environment & institutional support	<ul style="list-style-type: none">• Good training vehicle to establish applicant's niche• Sound approach (appropriate research design and feasible)• Well written with good alignment with applicant's career goals

Core Review Criteria (equal weighting)

1. Candidate

- NIH biosketch, personal statements, biography, reference letters

2. Career Development Plan

- Specificity about specific courses, training activities, meetings with mentors/consultants

3. Research Plan

- Feasible project and timeline, research that is a vehicle to utilize proposed training
- Incorporation of alternative strategies, potential pitfalls, data analyses

4. Mentors*, Consultants, and Collaborators

- NIH biosketch, letters of support, research expertise, research project funding
- **Mentored**
 - **K01, K08:**
- **Non-mentored**
 - **K22:**

5. Environment and Institutional Commitment to the Candidate

- Commitment to candidate's career development, 75% protected time for K-related activities

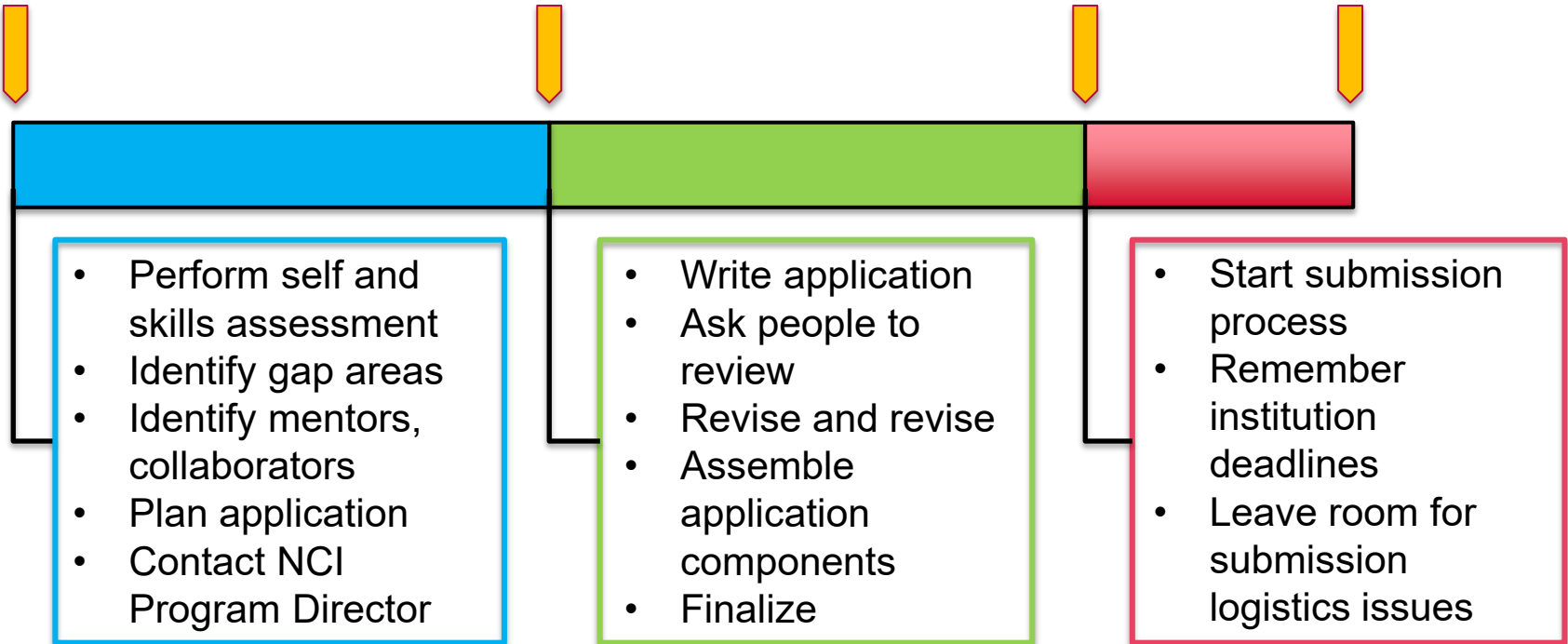
Suggested Timeline for Preparing a K-Award Application

6-9 Months
Prior

3-6 Months
Prior

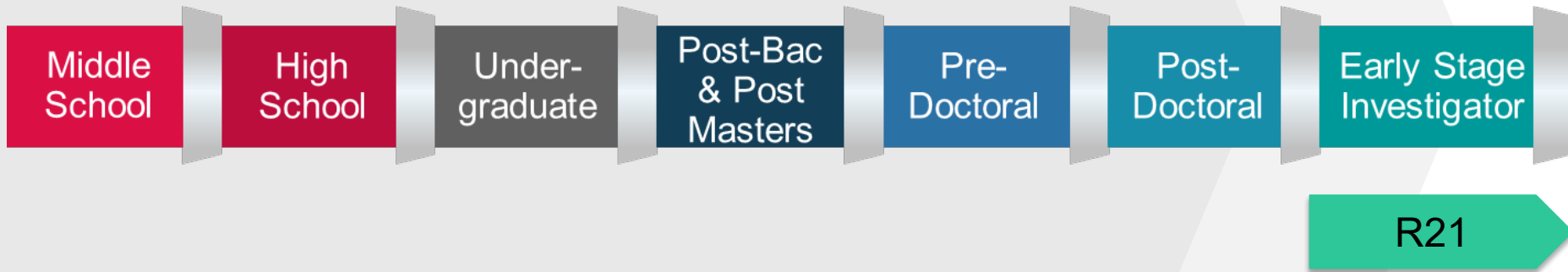
1 Month
Prior

Submission
Deadline





Exploratory Grant Award to Promote Workforce Diversity in Basic Cancer Research (R21 Clinical Trial Not Allowed)



R21 Exploratory Grant Award to Promote Workforce Diversity in Basic Cancer Research (R21 Clinical Trial Not Allowed), [PAR-21-061](#)

Eligibility: Early Stage Investigators or New Investigators; **cannot have previous R01 or grants over \$175k direct cost per year.**

Goal: Support eligible researchers to develop preliminary data for competitive R01 proposals.

Research focus: Basic biology of cancer

Budget: Direct Cost for 2 years \leq \$275k, \leq \$200k per year

Limit: An individual may receive no more than 2 awards including past and future iterations of this FOA.

Expected Due dates: **November 17**, 2021; June 14, 2022 etc.

Contact

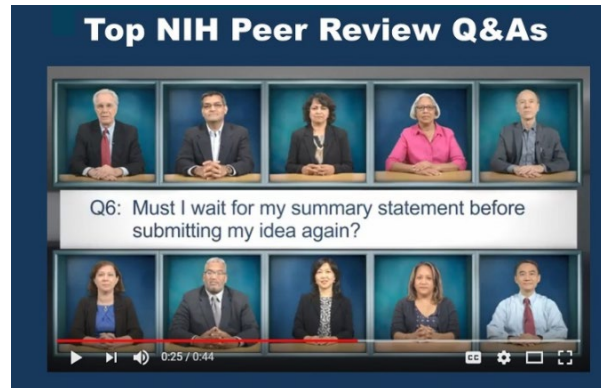
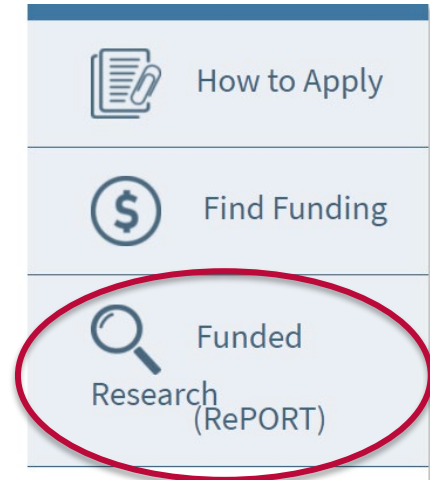
Dr. Laritza Rodriguez
laritza.rodriguez@nih.gov



Tips for Grant Applications:

- Find NIH grants and funding information:
<https://grants.nih.gov/grants/oer.htm>
- Visit NIH extramural diversity website:
<https://extramural-diversity.nih.gov>
- Learn about peer review at NIH Center of Scientific Review:

<https://public.csr.nih.gov/ApplicantResources/Pages/default.aspx>





Intramural Continuing Umbrella of Research Experiences (iCURE) Program



Intramural CURE (iCURE) – Research Experiences at NCI



- Mentored research experiences on **NCI campuses** in Bethesda, Shady Grove (Rockville) and Frederick, Maryland
- Supports **postbacs** (1 year), **graduate students** (2 years) and **postdocs** (3 years)
- Applications will open in the Fall for start date of Sept 1, 2022
<https://www.cancer.gov/about-nci/organization/crchd/diversity-training/icure>
- Centralized review and program-facilitated matches for scholars to PIs in NCI Intramural Research Program



Contact

Dr. Jessica Calzola
iCURE@nih.gov



iCURE Eligibility and Focus on Diversity

iCURE scholars must be U.S. citizens, legal permanent residents, or non citizen nationals

Post-baccalaureate (Incl. Post Master's)

- Must meet both Postbac IRTA and iCURE eligibility criteria

Graduate Students

- Must currently be enrolled in a PhD or equivalent graduate program

Postdoctoral Fellows

- Must have a PhD, MD, or equivalent by proposed iCURE start time
- No more than 5yrs of relevant research experience

Individuals from groups identified in NIH's Notice of Interest in Diversity ([NOT-OD-20-031](#)) as underrepresented in the biomedical, clinical, behavioral, and social sciences are particularly encouraged to apply.

NIH Notice of Interest in Diversity

- Race and ethnicity
- Disability
- Disadvantaged background

iCURE Program Experience

Support from iCURE Program Staff

- Individual scheduled and ad hoc check-ins
- Virtual platforms Hub and Teams

iCURE Cohort Activities

- Social Committee & Journal Club
- iNET – connect with peers in other NIH institutes
- Gatherings and retreats

Research

Professional Development Activities

- CRCHD Professional Development Workshop and Mentored Mock Review
- Scientific focus area units
- Skills development

Mentoring Network

- Diverse perspectives
- Career and professional guidance
- Cultural and social support

Apply to iCURE



- An eRA Commons ID is required to apply. If you don't have one, please contact iCURE@nih.gov to obtain one.
- Immediate and long-term career goals
- References
- Post-baccalaureate (including post-masters) individuals
 - Submit application to the Posbaccalaureate IRTA Program Application Center (<https://www2.training.nih.gov/apps/publicforms/pbt/forms/login.aspx>); **AND,**
 - Submit application to the iCURE Management System (IMS) (<https://ims.nci.nih.gov/>)
- Graduate students and postdoctoral fellows
 - Submit application to the IMS (<https://ims.nci.nih.gov/>)
 - Application attachments: CV, transcript, three references

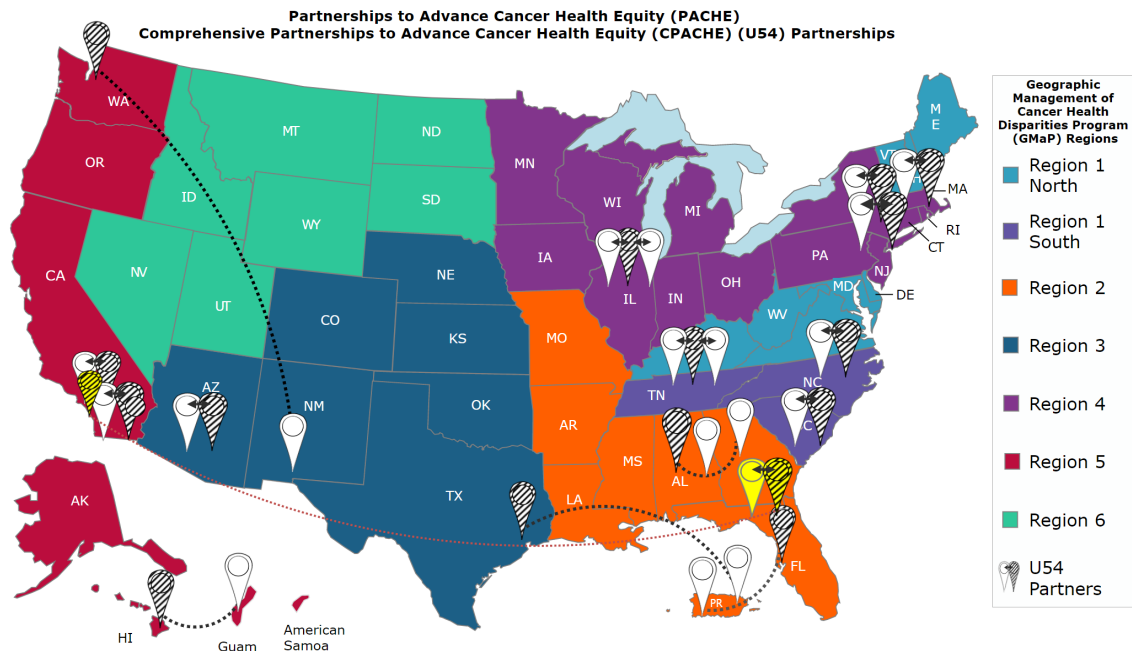
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Geographic Management of Cancer Health Disparities Program (GMaP)

GMaP is a seven-region network that fosters collaboration, resource-sharing, and capacity-building among cancer health disparities researchers, trainees, community health educators, and organizations.

- 7 regions, with regional hubs and regional coordinating directors (RCDs)
- Connects researchers and fosters professional relationships
- Coordinates professional development efforts
- Provides information on regional resources



GMaP Uses a Regional Approach to Support Disparities Research, Diversity Training & Outreach

GMaP REGION	REGIONAL HUB	GMaP RCD	Contact RCD
Region 1 North	University of Kentucky Markey Cancer Center	Erin J. Oakley	erinjoakley@uky.edu
Region 1 South	Hollings Cancer Center at the Medical University of South Carolina	Anissa Vines	nav21@live.unc.edu
Region 2	H. Lee Moffitt Cancer Center & Research Institute	Z'Kera D. Sims	ZKera.Sims@moffitt.org
Region 3	University of New Mexico Cancer Center	Miria Kano	MKano@salud.unm.edu
Region 4	Fox Chase Cancer Center	Carrie Norbeck	carrie.norbeck@fcc.edu
Region 5	Fred Hutchinson Cancer Center	Sara Cole	scole2@fredhutch.org
Region 6	Huntsman Cancer Institute at the University of Utah	Emily Kay	emily.kay@hci.utah.edu

GMaP Provides Regional Network Supports

- Monthly e-newsletters
- Social Media

Information



- Conference meet-ups
- Regional peer matching
- Mentor-mentee Matches
- Partnership Development

Interpersonal



- Webinars
- Workshops
- Travel Scholarships
- Pilot Grants
- Application Review Referrals

Career/Professional Support



- Cell and Animal Model Listings
- Biospecimen Listings
- Researcher Connections

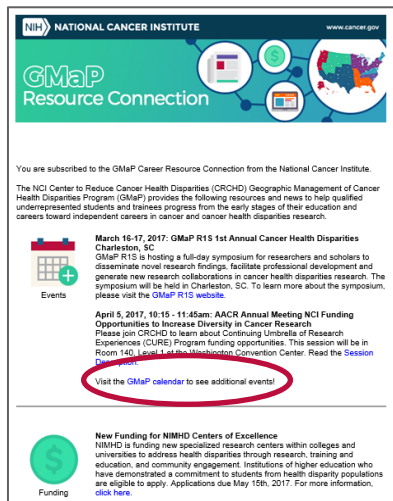
Regional Resources



General Information: CRCHD eBlast & NCIP Hub

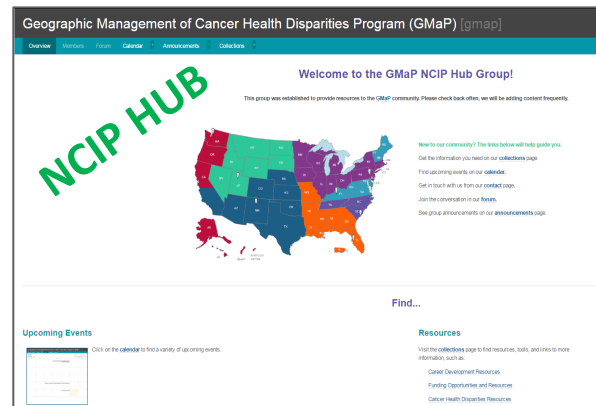
eBlast: Timely information delivered monthly from NCI to GMaP regions to you

GMaP Regional Hubs: Information repository always available online
<https://nciphub.org/groups/gmap>



The screenshot shows an email header from the National Cancer Institute (NIH) with the subject "GMaP Resource Connection". The main content includes a calendar icon and a link to "Visit the GMaP calendar to see additional events!". Below this, there are two event announcements: one for the "March 16-17, 2017: GMaP R15 1st Annual Cancer Health Disparities Charleston, SC" and another for the "April 5, 2017, 10-15: AACR Annual Meeting NCI Funding Opportunities to Increase Diversity in Cancer Research". A red circle highlights the calendar link.

- Funding Opportunities
- Resources/Tools
- News Items
- Job Announcements
- Special Initiatives



The screenshot shows the "Geographic Management of Cancer Health Disparities Program (GMaP) [gmap]" website. The page features a navigation bar with "Home", "About", "Events", "Calendar", "Resources", and "Contact". A large "NCIP HUB" banner is overlaid on the left. The main content area includes a "Welcome to the GMaP NCIP Hub Group!" message, a map of the United States with colored regions, and a "Find..." search bar. Below the search bar, there are sections for "Upcoming Events" and "Resources".

Getting Connected

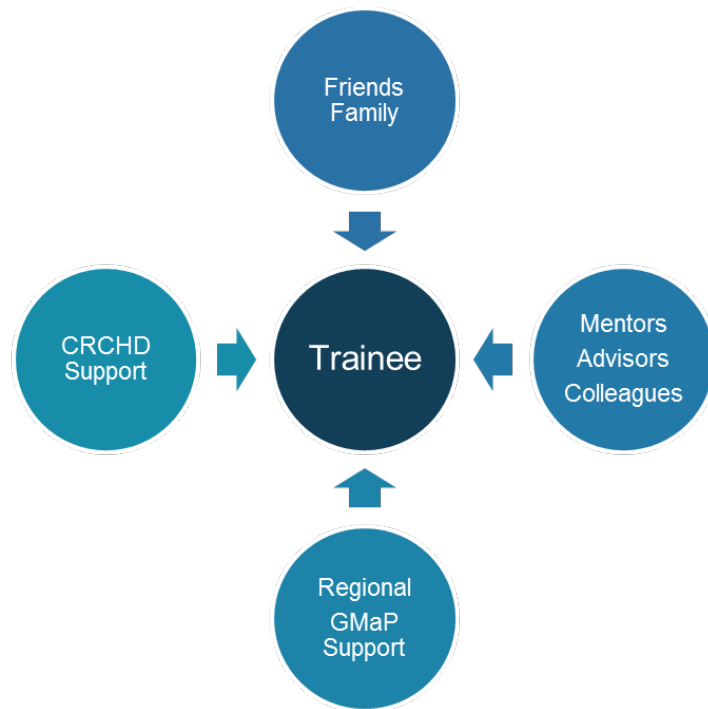
- Sign-up to join GMaP
- Connect with CRCHD on social media:
 -  @ncicrhd
 -  NCI CRCHD
- Visit us online: <http://crchd.cancer.gov>

Contact

Dr. LeeAnn Bailey
leeann.bailey@nih.gov

Dr. Anil Wali
walia@mail.nih.gov

Dr. Whitney Barfield
whitney.barfield@nih.gov



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Coming in November

NIH VIRTUAL SEMINAR ON PROGRAM FUNDING AND GRANTS ADMINISTRATION

Empowering the Research Workforce to Fuel Scientific Discovery

Monday, November 1 - Thursday, November 4

FREE REGISTRATION

Register Now!



<https://nihvirtalseminar2021.vfairs.com/en/agenda-page>
<https://grants.nih.gov/2021-nih-virtual-seminar.htm#registration>



**NATIONAL
CANCER
INSTITUTE**

@NCICRCHD

<https://www.cancer.gov/about-nci/organization/crchd>

www.cancer.gov

www.cancer.gov/espanol