

AACR/ASCO Methods in Clinical Cancer Research  
Vail, Marriott Mountain Resort  
Vail, CO  
August 1-7, 2009

# Career Development Opportunities: The Government Can Help

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Acting Deputy Branch Chief  
Center for Cancer Training  
Cancer Training Branch

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES  
National Institutes of Health  
National Cancer Institute

## Learning Objectives (3)

- What funding opportunities (FO) are available through the NIH/NCI
- What do these FOs provided
- How to select the most appropriate FO

# Basics

## What is the difference between a research career award and a research grant?

- A career award supports the development of your research career
  - Moves you from where you currently are in your career to where you want to be 3-5 years from now
  - Develops your overall research career
  - Research is just one element
- A research grant is all about research

## NIH Terminology

- Intramural (programs): Within the Federal government
- Extramural (programs): Outside of the Federal government
- **NIH** program: A program open to be supported through each of the component NIH institutes
- **Institute-specific program**: A program supported only by a specific institute (NCI will be in **red**)

## NIH Terminology, cont'd

- Program types:
  - Institutional: Candidate applies to a program
  - Individual awards: Candidate applies for an award
- Announcement types:
  - RFA: One-time solicitation
  - PA, PAR: Announcements for ongoing programs

What NIH/NCI FOs are available?

# Where to find information on the FOs: Important Website Links

- National Institutes of Health\*
  - <http://grants.nih.gov/grants/oer.htm>
  - <http://grants.nih.gov/training/index.htm>
  - <http://grants.nih.gov/training/extramural.htm>
  - [http://grants.nih.gov/training/tac\\_roster.htm](http://grants.nih.gov/training/tac_roster.htm)
- National Cancer Institute\*
  - [Center for Cancer Training - National Cancer Institute](#)
  - [Cancer Training Opportunities Outside NCI \(Universities and Othe - National Cancer Institute\)](#)

**Funding Opportunities**

[Funding Opportunities \(RFAs, PAs\) & Notices](#)  
[Unsolicited Applications \(Parent Announcements\)](#)  
[Research Training & Career Development](#)  
[Extramural Training Mechanisms](#)  
[Intramural](#)  
[News](#)  
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[Small Business \(SBIR/STTR\)](#)  
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**NIH-Wide Initiatives**

[New and Early Stage Investigators](#)  
[Multiple Principal Investigators](#)  
[Genome-Wide Association Studies \(GWAS\)](#)  
[NIH Roadmap for Medical Research](#)  
[NIH Blueprint for Neuroscience Research](#)

**Global OER Resources**

[Glossary & Acronyms](#)  
[Frequently Used Links](#)  
[Frequent Questions](#)

**Extramural Training Mechanisms**

- [Ruth L. Kirschstein National Research Service Awards \(NRSA\) Training Grants and Fellowships](#)

- [Guide to Kirschstein-NRSA Programs](#)
- [Institutional Research Training Grants](#)
- [T Kiosk](#) - Information about NRSA Training Grants Funding Opportunities
- [Individual Fellowships](#)
- [F Kiosk](#) - Information about NRSA Fellowship Funding Opportunities
- [Kirschstein-NRSA Policy Issues](#)

- [Non-NRSA Fellowships and Training Grants](#)

- [Career Development Awards](#)

- [K Kiosk](#) - Information about NIH Career Development Awards
- [Career Award Wizard](#)
- [NIH Forms and Applications Page](#). (Including PHS [PHS 398](#) and [PHS 2590](#) application and other [Training Forms](#))
- [Guidelines for Reviewers](#) (Links to review guidelines for various fellowship "K" mechanisms)
- Career Award Policy Issues
  - [Expiration of Several Research Career Development Award \(K Award\) Funding Opportunity Announcements \(01/30/2009\)](#)
  - [Announcing a Delay in Transition to Electronic Submission of Applications for Individual National Research Service Awards \(Fs\) and Confirming Plans to Transition Individual Research Career Development Awards \(Ks\) \(01/28/2009\)](#)
  - [NIH Policy Concerning Career Development \(K\) Awards: Leave, Temporary Adjustments to Percent Effort, and Part-Time Institutional Appointments \(01/21/2009\)](#)
  - [NIH Policy Concerning Career Development \(K\) Awards: Leave, Temporary Adjustments to Percent Effort, and Part-Time Institutional Appointments \(01/16/2009\)](#)
  - [Transition of Individual Career Development \(K\) Applications to Electronic Submission \(Grants.gov\)-New Business Processes and Other Information \(12/12/2008\)](#)
  - [Revision of NIH Policy Concerning Concurrent Support from Mentored Career Development \(K\) Award and a Research Grant \(NOT-OD-08-065\) \(04/10/2008\)](#)
  - [Determining Full-Time Professional Effort for Career Awards, \(08/03/2004\)](#)

- [Extramural Loan Repayment Programs](#)

- [Home Page - NIH Loan Repayment Programs](#)
- [NIH Extramural Loan Repayment Programs \(LRP\)](#)
- [Loan Repayment Program for Clinical Research](#)
- [Loan Repayment Program for Pediatric Research](#)
- [Loan Repayment Program for Health Disparities Research](#)

**News Flash**

**Paid research experiences for students and science teachers available for this summer at research institutions across the country.**

**These opportunities are made available through American Recovery and Reinvestment Act (ARRA) funding.**

**See the [NIH ARRA Summer Research Experiences Web site](#) for details.**



## Funding Opportunities

Funding Opportunities (RFAs,  
PAs) & NoticesUnsolicited Applications (Parent  
Announcements)Research Training & Career  
Development

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## NIH-Wide Initiatives

New and Early Stage

Investigators

Multiple Principal Investigators

Genome-Wide Association  
Studies (GWAS)

NIH Roadmap for Medical

Research

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Research

## Global OER Resources

Glossary &amp; Acronyms

Frequently Used Links

Frequent Questions

## NIH Training Advisory Committee Roster

(\* Area Code 301 Assumed Unless Otherwise Shown)

Name	IC	Bldg	Rm	MSC	Phone +	Fax *	E-mail
<b>Chair</b>							
Dr. Nancy Desmond	NIMH	6001 Executive Blvd.	7197	9645	443-3107	443-1731	<a href="mailto:ndesmond@nih.gov">ndesmond@nih.gov</a>
<b>Co-Chair</b>							
Dr. Rodney Ulane	OD	6705 Rockledge Drive	3539	7963	451-4225	480-0146	<a href="mailto:ulanere@mail.nih.gov">ulanere@mail.nih.gov</a>
<b>Members</b>							
Dr. Neeraj Agarwal	NEI	5635 Fishers Lane	1300	9300	435-8158	496-9997	<a href="mailto:agarwainee@mail.nih.gov">agarwainee@mail.nih.gov</a>
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Dr. David Banks	NINR	6701 Democracy Blvd.	710		496-9558	480-8260	<a href="mailto:banksdh@mail.nih.gov">banksdh@mail.nih.gov</a>
Dr. Amanda Boyce	NIAMS	6701 Democracy Blvd	800	4872	451-6514	480-4543	<a href="mailto:boycea@mail.nih.gov">boycea@mail.nih.gov</a>
Dr. Alison Cole	NIGMS	45 Center Drive	2AS49K		594-3827	480-2802	<a href="mailto:ColeA@nigms.nih.gov">ColeA@nigms.nih.gov</a>
Dr. Nancy Desmond	NIMH	6001 Executive Blvd.	7197	9645	443-3563	443-1731	<a href="mailto:ndesmond@nih.gov">ndesmond@nih.gov</a>
Dr. Bernard Driscoll	CSR	6701 Rockledge Dr	5184	7844	435-1242	480-4184	<a href="mailto:DriscollB@csr.nih.gov">DriscollB@csr.nih.gov</a>
Dr. Valerie Florance	NLM	6705 Rockledge Dr.	301		594-4882	402-2952	<a href="mailto:florancev@nih.gov">florancev@nih.gov</a>
Dr. Mimi Ghim	NIDA	6001 Executive Blvd.	NSC/5232	9591	402-1918	443-6277	<a href="mailto:ghimm@nida.nih.gov">ghimm@nida.nih.gov</a>



## Page Options

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## The Center for Cancer Training

- [Cancer Training at NCI](#)
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- [About CCT](#)
- [Contact Information](#)

## Training Cancer Researchers for the 21st Century

The Center for Cancer Training (CCT) is supporting NCI's goal of training cancer researchers for the 21st century. Training programs are offered at NCI laboratories and clinics in Maryland and at universities and institutions nationwide. [More >](#)

**Notice: K awards must be submitted electronically.**

### ▶ Cancer Training Opportunities at NCI

Training, fellowships, and other professional educational opportunities for students and scientists on the NIH/NCI campus in Maryland (Intramural).

### ▶ Cancer Training Opportunities Outside NCI

Training grants, fellowships, research career development awards, and education research grants for students and scientists to receive support through NCI funding (Extramural).

### ▶ Other Fellowships and Internships

Training, fellowship, and professional educational opportunities at NIH, U.S. Department of Health and Human Services, and other federal agencies outside of NCI.

### ▶ About CCT

The Center for Cancer Training (CCT) is supporting NCI's goal of training cancer researchers for the 21st century.

### ▶ Contact Information

CCT staff contacts organized by NCI program areas and award types.



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Visit NCI's [Recovery Act Funding Announcements page](#) to find training supplements for current grantees.

## The Center for Cancer Training



## Cancer Training Opportunities Outside NCI (Universities and Other Institutions)

Training grants, fellowships, research career development awards, and education research grants for students and scientists to receive support through NCI funding (extramural).

## Notice:

- [K awards must be submitted electronically.](#)
- [K award recipient salaries have increased.](#)
- [F32 and T32 fellow stipends have increased.](#)

## Related Pages

- [Contact Information](#)
- [Other Fellowships and Internships](#)

[Find Training by Career Stage](#)

A listing of NIH-supported fellowships and training programs categorized by educational and experience requirements (i.e., postdoctoral, new faculty levels and established investigators) at universities and institutions across the country.

[Find Funding Opportunities for Training by Award Type](#)

A view of NCI-supported fellowships, research career development awards and training/education research grants organized by award type.

[Find Diversity Awards at CRCHD](#)

NCI's Center to Reduce Cancer Health Disparities (CRCHD) offers training opportunities for students, researchers and faculty from racially and ethnically diverse populations that are underrepresented in biomedical research.

[NIH Career Award Wizard](#)

NIH's Career Award Wizard is designed to help identify an Individual NIH Career Award that might be appropriate.

[< CCT home](#)



 SEARCH

- NCI Home
- Cancer Topics
- Clinical Trials
- Cancer Statistics
- Research & Funding
- News
- About NCI

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The Center for Cancer Training

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## The Center for Cancer Training



### Find Training by Career Stage

A listing of NIH-supported fellowships and training programs categorized by educational and experience requirements (i.e., postdoctoral, new faculty levels and established investigators) at universities and institutions across the country.

- [Postdoctoral Fellows and Mentored New Faculty](#)
- [New Faculty in Independent Research Positions](#)
- [Midcareer and Established Investigators](#)

[< CCT home](#)














Related Pages

- [Contact Information](#)
- [Other Fellowships and Internships](#)



[Cancer Training Opportunities Outside NCI \(Universities and Othe - National Cancer Institute#](#)

# Relevant NIH/NCI Support Opportunities

	MENTORED			NEWLY INDEPENDENT
	Residency/ Fellowship	Late Fellowship	Jr. Faculty	
Basic Science				
POR			 	
PCBPS			 	

\*:Non-tenure track clinician

POR=Patient-oriented research

PCBPS=Prevention, control, behavioral, population sciences

# Relevant Funding Opportunities

- Institutional:
  - Ruth L. Kirchstein National Research Service Awards For Institutional Research Training Grants (T32) <http://grants.nih.gov/grants/guide/pa-files/PA-08-226.html>
  - NCI Cancer Education and Career Development (R25T) Award <http://www.cancer.gov/researchandfunding/training/r25t>

# Relevant Support Opportunities

- Institutional, cont'd:
  - Paul Calabresi Career Development Program for Clinical Oncology (K12)
    - <http://www.cancer.gov/researchandfunding/training/K12/page3> -
  - Institutional Clinical and Translational Science Award (U54 (K12))
    - <http://www.ctsaweb.org/>

## Relevant Support Opportunities, cont'd

- Selected individual mentored awards (3)
  - Cancer Prevention, Control, Behavioral and Population Sciences Career Development Award (K07)
    - <http://grants.nih.gov/grants/guide/pa-files/PA-09-078.html>
  - Mentored Clinical Scientist Research Career Development Award (K08)
    - <http://grants2.nih.gov/grants/guide/pa-files/PA-09-042.html>

## Relevant Support Opportunities

- Selected individual mentored awards, cont'd:
  - Mentored Patient-Oriented Research Career Development Award (K23)
    - [PA-09-043: Mentored Patient-Oriented Research Career Development Award \(K23\)](#)
- Individual unmentored award (1)
  - The NCI Transition Career Development Award (K22)
    - [PAR-09-089: The NCI Transition Career Development Award \(K22\)](#)

# Relevant NIH/NCI Support Opportunities

	MENTORED			NEWLY INDEPENDENT
	Residency/ Fellowship	Late Fellowship	Jr. Faculty	
Basic Science	T32 F32	T32 F32	K08	K22
POR	T32 F32	K12 T32 F32	K12 K23	K22
PCBPS	T32, R25T F32	K07 T32, R25T F32	K07 R25T	K22

\*:Non-tenure track clinician

POR=Patient-oriented research

PCBPS=Prevention, control, behavioral, population sciences

## Translational Research?

- Focus of NCI K12 and NIH U54
- K22
- K07
- K08: if research career emphasis is on laboratory-based research
- K23: if research career emphasis is on the POR aspect

# Training Grant (T32/F32) Provisions/Requirements

- US citizen or permanent resident
- Sponsor/mentor (F32)
- Full-time effort commitment
- Provides fellows up to 3 years of stipends, no research support
- For F32:
  - Evidence of prior research productivity
  - New research training experience

# Career Award Provisions/Requirements-1

- US citizen or permanent resident
- Mentored K-awards require mentors:
  - NCI K12: Basic science and POR mentors
- At least 75% (9 C-M) effort commitment
  - K12:  $\geq 2$  year commitment

## Career Award Provisions/Requirements-2

- Individual K-awards:
  - Prior research experience/publications
  - Strong institutional commitment to your research career
  - Apply for an R-type grant prior to 3<sup>rd</sup> year of support (K22)
- 3-5 years salary and research support

## R25T Provisions/Requirements

- Generally, US citizen or permanent resident
- Multiple mentors
- No minimum % effort commitment requirement
  - Required  $\geq 2$  year commitment
- Didactics
- 2-5 years salary and research support

# Selecting the appropriate funding opportunity

## Factors (7) to consider in selecting the most appropriate funding opportunity

- Citizenship status
- What do you need
  - Research training
  - Long term mentored career development
  - Short term unmentored career development/protected time
- Research focus
- Stage in career development
- Level of institutional commitment to you
- Prior research experience including publications
- How much effort you can commit

## Selecting the most appropriate funding opportunity-1

- If **not US citizen/permanent resident**, then only the R25T. **Otherwise**,
- If in **fellowship**:
  - No publications: institutional programs
  - Publications:
    - No institutional commitment: Institutional programs, F32
    - Strong institutional commitment: can additionally apply for an NCI K07

## Selecting the most appropriate funding opportunity-2

- If US citizen/permanent resident, and **mentored junior faculty**:
  - No publications: institutional programs
  - Publications:
    - **Weak** institutional commitment: Institutional programs
    - **Strong** institutional commitment: Can also apply for mentored K's

## Selecting the most appropriate funding opportunity-3

- If US citizen/permanent resident, and **unmentored new junior faculty**:
  - NCI K22 if need protected time to establish first independent research program
  - Otherwise, R-grants

# Useful additional information\*

# <http://grants.nih.gov/grants/funding/submission/schedule.htm>

## Standard Due Dates for Competing Applications

Note: The tables below only include the most commonly used mechanisms.

On This Page: [Notices](#) | [Application Due Dates](#) | [Review & Award Cycles](#) | [Submission Policies](#)

### Notices

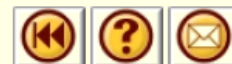
- [Important New Application Changes Posted](#)
- [Selected Extramural Policy Notices](#) - Including those affecting submission of grant applications.
- [Parent Announcements](#) - For applicants who wish to submit what were formerly termed "unsolicited" or "investigator-initiated" applications.
- [NIH Transition Plan](#) (PDF - 17 KB) - complete listing of transition dates to electronic applications.
- AIDS and AIDS-related applications for all mechanisms are submitted on the [AIDS and AIDS-related dates](#).
- RFAs and some PARs have special receipt dates indicated in the specific NIH Guide Announcement. NOTE: If the announcement indicates resubmissions/renewals/revision are allowed, then these are made on the special receipt dates, not the Standard Receipt Dates.
- Change in Terminology:** The move to electronic applications has brought a change in terminology. The new Grants.gov terminology (included in the table above) corresponds to the traditional NIH terms as follows:  
 New = New  
 Renewal = Competing Continuation  
 Resubmission = Revised or Amended  
 Revision = Competing Supplement

### Application Due Dates

Mechanism(s)	Program Description	Application Form	Cycle I Due Date	Cycle II Due Date	Cycle III Due Date
<b>P Series</b> All - new, renewal, resubmission, revision	Program Project Grants and Center Grants  NOTE: Applicants should check with the relevant Institute or Center (IC), since some do not accept P series applications three times a year.  Transition to SF424 (R&R): <a href="#">On Hold</a>	<a href="#">PHS 398</a>	January 25	May 25	September 25
<b>R18/U18 R25</b> All - new, renewal, resubmission, revision	Research Demonstration Education Projects	<a href="#">SF424 (R&amp;R)</a>	January 25	May 25	September 25







In order to access the CRISP system you must use one of the following browsers with JavaScript enabled, Netscape 3.0 (or later) or Internet Explorer 4.0 (beta or later). Internet Explorer 3.0, despite best programming efforts, is not compatible.

## Current and Historical Awards (1972 - 2009) Query Form

<b>Enter Search Terms:</b>		<input style="width: 95%;" type="text"/>		
<b>Global Logic:</b>		<input type="radio"/> And <input checked="" type="radio"/> Or <input type="radio"/> Phrase	<b>Expansion Logic:</b>	<input type="radio"/> Stem <input checked="" type="radio"/> None
<input type="button" value="Submit Query"/>		<input type="button" value="Clear Query"/>		
<b>Maximum Records:</b>		<input style="width: 50%;" type="text" value="250"/>	<b>Thesaurus:</b>	<a href="#">View CRISP Thesaurus</a>
<b>PI Name (Last, First):</b>		<input style="width: 80%;" type="text"/> , <input style="width: 20%;" type="text"/>		
<b>Award Type:</b>		<input style="width: 80%;" type="text" value="All Types"/>	<b>Activity:</b>	<input style="width: 80%;" type="text" value="All Activities"/>
<b>Grant Number:</b>		<i>Use '%' for wildcard</i> <input style="width: 80%;" type="text"/>	<b>Grant Title:</b>	<i>Use '%' for wildcard</i> <input style="width: 80%;" type="text"/>
<b>IRG:</b>		<div style="border: 1px solid black; padding: 2px;">All 02 0DIR</div>	<b>Institutes and Centers:</b>	<div style="border: 1px solid black; padding: 2px;">All NIAAA - Alcohol Abuse &amp; Alcoholism NIA - Aging</div>
<b>Institution:</b>		<input style="width: 80%;" type="text"/> <i>Use '%' for wildcard</i>		
<b>Fiscal Year:</b>		<div style="border: 1px solid black; padding: 2px;">2009 2008 2007</div> <i>Use Ctrl to select multiple years.</i>	<b>State:</b>	<div style="border: 1px solid black; padding: 2px;">All Alabama Alaska</div>
<input type="button" value="Submit Query"/>		<input type="button" value="Clear Query"/>		



Version  
2.5.2.0


## Hit List

[Back to Search Form](#)

*You had 49 hits for the query:*

Grant Number	PI Name	Project Title
5K23CA125205-02	ADAMS, SYLVIA	<a href="#"><u>Augmenting Cancer Vaccine Therapy with TLR9 agonists</u></a>
1K23CA127141-01A1	AHUJA, NITA	<a href="#"><u>Epigenetic markers involved in colorectal cancer recurrence and metastases</u></a>
1K23CA120862-01A2	AMARAVADI, RAVI	<a href="#"><u>Therapeutic approaches that target cancer cell metabolism</u></a>
5K23CA118419-02	ATTAR, EYAL	<a href="#"><u>Defining clinical efficacy and markers predicting response to bortezomib in AML</u></a>
7K23CA107450-0408	BAGATELL, ROCHELLE	<a href="#"><u>Hsp90 as a Target for the Treatment of Childhood Cancer</u></a>
7K23CA106544-05	BENZO, ROBERTO	<a href="#"><u>Pulmonary rehabilitation before lung cancer resection.</u></a>
5K23CA109004-04	BLUM, KRISTIE	<a href="#"><u>Targeting Transcriptional Repression in CLL</u></a>
5K23CA120708-03	BLUM, WILLIAM	<a href="#"><u>Experimental Therapeutics in Acute Leukemias</u></a>
5K23CA115682-04	BROWN, JENNIFER	<a href="#"><u>Genetic Alterations in Families with Multiple Lymphomas</u></a>

## Center for Cancer Training

Dir: Jonathan Wiest, Ph.D.

## Cancer Training Branch

Acting Br. Chief: Jonathan Wiest, Ph.D.

Acting Dep. Br. Chief: Lester S. Gorelic, Ph.D.

### Program Directors

Lester S. Gorelic, Ph.D.

Sonia Jakowlew, Ph.D.

Shannon Lemrow, Ph.D.

Nancy Lohrey, MT-ASCP,  
MS

Dorkina Myrick, MD-PhD

Basic Science	PCBPS	POR	Cancer Education
X	X	X	X
X	X		
X	X		
X	X		
X	X	X	

AACR/ASCO Methods in Clinical Cancer Research  
Vail, Marriott Mountain Resort  
Vail, CO  
August 1-7, 2009

# Career Development Opportunities: The Government Can Help

Lester S. Gorelic, Ph.D.  
Acting Deputy Branch Chief  
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Cancer Training Branch

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES  
National Institutes of Health  
National Cancer Institute