U.S. Department of Health and Human Services
National Institutes of Health

Office of Centers, Training, and Resources

Cancer Training Branch

Training and Career Development Opportunities

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Dear Colleague:

We ask that you partner with the National Cancer Institute in marketing our training and career development programs so that together we can reach the broadest possible pool of highly qualified candidates who wish to pursue cancer research careers. Recognizing that diversity can enhance research organizational/institutional effectiveness, we hope that increased marketing will also attract and help retain increasing numbers of women and minorities into the cancer research enterprise. We urge the participants in the cancer research manpower enterprise to work cooperatively and collegially in reaching these common goals. The NCI Cancer Training Branch (CTB) welcomes the opportunity to work in partnership with the scientific and academic community to build a strong, diverse cadre of cancer researchers.

After receiving the advice of hundreds of cancer scientists throughout the nation, in 1999 the NCI launched a strategic plan for training and career development based on the following goals:

1. **Emphasize stabilizing the research careers of endangered disciplines critical to the progress of cancer research in the future**
2. **Focus on strategic career tracks that begin at the predoctoral/postdoctoral levels and continue through the junior faculty and established investigator stages of a career**
3. **Provide a spectrum of opportunities that rely solely on continuously available, competitive, investigator-initiated concepts (e.g., program announcements) rather than on institute-initiated concepts that require dollar set asides (e.g., Requests for Applications or RFAs).**

To assist institutions and departments in advertising NCI funding opportunities in research training and career development, we have compiled the accompanying booklet describing these opportunities. Copies may be obtained by an email request at http://cancertraining.nci.nih.gov/contactus2.html or by calling 301-496-8580. The booklet describes each funding mechanism (for individuals or institutions) and targeted career stages (ranging from pre-doctoral, mentored post-doctoral, junior faculty, independent-junior faculty to established/midlevel -senior investigators) and career tracks they support. See the next page for a listing of all the funding mechanisms. CTB staff may be contacted for additional information and assistance. Their names and email addresses are cited along with the descriptions of each program they administer. All may be reached by phone at 301-496-8580. Detailed information, including Program Announcements, additional special instructions, and answers to frequently asked questions may be found at the CTB Website: http://cancertraining.nci.nih.gov/.

While the programs described in this "training booklet" are available to all eligible applicants, minority scientists/applicants or those who represent a minority-serving institution should also explore "Minority Scientists/Institutions" at the CTB website and determine whether these special programs provide a greater opportunity for development than the primary career tracks described. In addition, individuals working or interested in areas of research that usually are not considered cancer research or that are highly transdiciplinary, should examine the "Transdisciplinary Sciences" (K25) site at http://grants1.nih.gov/grants/guide/pa-files/PA-02-127.html
Thank you in advance for assisting us in this important endeavor. We are confident that through this cooperative effort we can attract and retain the best and brightest candidates for careers in cancer research.

Warm Regards,

Carolyn Strete, Ph. D.
Chief, Cancer Training Branch,
OCTR, OD, NCI
Email: cstrete@nih.gov

NCI Research Training, Career Development and Education Opportunities

Career Stage	Award Type	Mechanism	Program Title (science emphasis & degree requirements)	Direct Cost[1] Max./yr
Undergraduate, High School & Under	Institutional	1. R25E	Cancer Education Program[2]	$300K
Predoctoral	Institutional	1. T32	Ruth L. Kirschstein National Research Service Award Institutional Research Training Program (Basic Research)	$500K[3]
		2. R25T	Cancer Education and Career Development Program (Cancer Prevention, Control, Behavioral and Population Sciences)	$500K
	Individual	3. Suppl.	Minority (administrative) Supplements to T32 grants / R25T grants	$NA/40K
Mentored Postdoctoral or Junior Faculty	Institutional	1. T32	Ruth L. Kirschstein National Research Service Award Institutional Research Training Program (Basic research; Ph.D.s & M.D.s)	$500K[3]
		2. R25T	Cancer Education and Career Development Program (Ph.D.s & M.D.s)	$500K
		3. K12	Clinical Oncology Career Development Program (POR[4]; M.D.s, etc.)	$700K
	Individual	4. F32	Ruth L. Kirschstein National Research Service Awards for Individual Postdoctoral Fellows (Basic Research; Ph.D.s & M.D.s)	$56.3K
		5. K01	Howard Temin Award[5] (Basic Research; Ph.D.s & M.D.s)	$105K
		6. K07	Cancer Prevention, Control, Behavioral and Population Sciences Career Development Award (Ph.D.s & health professional doctorates)	$105K
		7. K08	Mentored Clinical Scientist Career Development Award (Basic research; health professional doctorates)	$105K
		8. K23	Mentored Patient-Oriented Research Career Development Award; clinical doctorates	$105K
		9. K25	Mentored Quantitative Scientist Career Development Award (Ph.D.s)	$115K
		10.Suppl.	Minority (administrative) supplements to T32 / R25T/ K12 grants	$52.6/105/105K
Independent/Junior Faculty	Individual	1. K01	Howard Temin Award [2](Basic research; Ph.D.s & M.D.s)	$125K
		2. K22	NCI Transition Career Development Award (Basic Research/POR/Cancer Prev. & Control (health professional doctorates only & NIH intramural Ph.D.s)	$125K
Independent/Established (Mid level-Senior)	Individual	1. K05	NCI Cancer Prevention, Behavioral and Population Sciences Established Investigator Award (Health professional & Ph.D.' s	$113K [6]
		2. K24	Established Investigator Award in Patient-Oriented Research (POR[4], clinical doctorates)	$113K [6]
All Career Stages[3]	Spec. Institutional	R25E	Cancer Education Grant Program	$300K [3]

[1] Does not include fringe benefits.
[2] Supports development of new academic curricula, introduction to research experiences for science & pre-med students; workshops, short courses, etc.; and outreach programs to the lay community.
[3] May be exceeded with prior NCI permission
[4] POR=Patient-oriented Research.
[5] Bridge support for transition from mentored career stage to independence.
[6] Up to 50% of Federal cap on salary + $20K in general support costs.

Training and Career Development: *http://cancertraining.nci.nih.gov/*

Career Track: Basic Science

Ruth L. Kirschstein National Research Service Award Institutional Research Training Grants -T32

Important Announcements:

NIH Guide: http://grants1.nih.gov/grants/guide/pa-files/PA-02-109.html

NCI website: http://cancertraining.nci.nih.gov/research/basicphd/t32full.html

Purpose:

To prepare individuals for careers in basic cancer research, clinical cancer research and/or cancer research in the prevention, control, behavioral and population-based sciences.

Eligibility:

- **Only domestic, non-profit, non-Federal, public or private institutions may apply to provide research training through the T32 grant mechanism.**
- **Trainees must be U.S. citizens, non-citizen nationals, or permanent residents of the U.S. at the time of appointment to the training grant.**
- **Predoctoral trainees must be pursuing the Ph. D. Degree or a comparable research doctoral degree. No more than 25% of the trainees requested in new applications may be predoctoral trainees. Continuing applications should strive to reach this percentage.**
- **Postdoctoral research training is for individuals who have received a Ph.D., D.V.M., D.D.S., M.D. or comparable doctoral degrees.**
- **The applicant institution must have a strong research program in the area(s) proposed with requisite staff and facilities. All mentors must have cancer-related or cancer-relevant peer reviewed research support.**
- **The Principal Investigator of the grant must have the training and experience to appoint trainees and manage the training program according to official NRSA guidelines.**

Period of Support: Up to 5 years, renewable.

Allowable Costs:

- **Trainee stipends (FY2003):**
- **Predoc: $19,968.**
- **Postdoc: $34,200 to $50,808 based on years of relevant experience.**
- **Trainee travel.**
- **Training related expenses (FY2003): Predoc $2,200 Postdoc $3,850.**

NCI Contact: David Eckstein (Eckstein@mail.nih.gov)and Lester Gorelic (gorelicl@mail.nih.gov)

Review Criteria -T32

PEER REVIEW PROCESS

Upon receipt, competing applications will be reviewed both by the Center for Scientific Review (CSR) and the National Cancer Institute (NCI) for completeness and for conformance to all eligibility requirements and special provisions and requirements. Incomplete applications will be returned to the applicant without further consideration.

Applications that are judged to be complete and eligible will be evaluated according to the peer review criteria for merit by a standing peer review group convened by the NCI Division of Extramural Activities. The National Cancer Advisory Board also reviews the applications to ensure that they meet the broad program needs and priorities of the NCI and the National Cancer Program before an award is made.

REVIEW CRITERIA

The following review criteria are a combination of those listed in the Program Announcement and those used by the NCI.

These review criteria enter into the priority score:

PROGRAM CHARACTERISTICS: The reviewers will evaluate: the distinctive nature of the training program relative to other training programs in the institution utilizing the same mentors and serving the same organizational units (e.g., departments); the quality of the training experiences that fit the program aims; and the overall content of the program that characterizes it as a cancer training program. They will also assess the likelihood that the program will achieve its proposed training goals. **For competing continuation applications,** they will evaluate the track record of the training program in achieving its objectives.

For postdoctoral trainees: The reviewers will evaluate: the objectives, design and direction of the research training program; and the seminars/invited lectures providing all trainees with a perspective on the issues, approaches, concepts and opportunities in **cancer** basic science, patient-oriented research and in **cancer** prevention and control.

For predoctoral trainees: The reviewers will evaluate: the admission standards for predoctoral students and the quality of the objectives, design and direction of the research training program; formal curriculum/course work and its suitability for training pre-doctoral level candidates; and the seminars/invited lectures providing all trainees with a perspective on the issues, approaches, concepts and opportunities in **cancer** basic science, patient-oriented research and in **cancer** prevention and control.

PROGRAM DIRECTOR: The reviewers will evaluate the qualifications of the Program Director to provide the administrative and scientific leadership of a **cancer** training program.

PARTICIPATING FACULTY: The reviewers will evaluate:

- The **cancer** research focus of the faculty (at least 50 percent of faculty must have independent research support directly relevant to cancer research, and the remaining faculty must have research support reasonably related to cancer, and should be reflected in the proportion of faculty identified as mentors); quality of the research experience and productivity of the faculty who will serve as mentors, and their individual success in obtaining independent research support;

- the availability of each mentor to provide research training; track record of the faculty in training individuals including the research productivity of past trainees and their success in achieving independence; faculty stability and cooperation;

- and the appropriateness of the trainee to faculty ratio. **For competing renewal applications**, the reviewers will also evaluate the track record of the mentors in training appointees who have continued in successful research careers.

TRAINEES: The reviewers will assess:

- the quality and adequacy of the recruitment and selection process for trainees;

- the adequacy of the pool size of high quality trainees;

- and the trainees' track record of degrees attained and the current career status of past trainees (if available). **For competing renewal applications**, they will also assess the track record of filling awarded trainee slots with high quality trainees during the prior funding period;

- the evenness of distribution of trainee appointments among the training program mentors; success in recruitment of underrepresented minorities;

- and the track record of the training program in supporting individuals with M.D. or other health professional degrees for at least two years.

TRAINING RESOURCES AND ENVIRONMENT: The reviewers will assess the availability and adequacy of the necessary facilities, equipment, and space; the quality and cooperation of other basic and clinical departments and programs that might be available to support program goals; and the strength of the institutional support of the proposed training.

MINORITY RECRUITMENT AND RETENTION PLAN: The reviewers will evaluate the adequacy of the plan, the past efforts at minority recruitment, and proposed changes or expansion of past practices. The plan must be specific to the training program proposed. Reference to plans on the part of the institution is not sufficient. *The evaluation of the plan is factored into the priority score.*

These additional criteria do not enter into the priority score:

BUDGET: The reviewers will comment on whether the budget can accommodate the proposed number of trainees?

PLAN FOR TRAINING IN THE RESPONSIBLE CONDUCT OF RESEARCH: The reviewers will evaluate the plan for the instruction in the responsible conduct of research (data management and record keeping, conflict-of-interest, responsible authorship, scientific misconduct, use of human subjects and animals in research). Institutional plans are appropriate. The rationale for the plan of instruction must be provided. The activities described for training must be required of trainees. *The evaluation of the plan is not considered in determining the priority score.*

OTHER CONSIDERATIONS*: The following statements regarding human subjects and animal care and use are printed in all T32 summary statements since it is undetermined as to whether trainees will use human subjects or materials from human subjects or animals in their individual projects.*

PROTECTION OF HUMAN SUBJECTS*: Prior to funding, a project that involves human subjects must be reviewed and approved by the institutional review board and certification submitted to the awarding institute. The project must also conform to the NIH polices on data and safety monitoring and on the inclusion of women, minorities, and children in study populations (and a description of, and rationale for, the plans must be provided to the awarding institute). (If appropriate, the application should address the inclusion of Human Subjects, as well as the inclusion of Gender and Minorities, and the inclusion of Children as Participants. See:*

http://grants.nih.gov/grants/funding/phs398/section_1.html#e_humansubs

VERTEBRATE ANIMALS*: Prior to funding, a project that utilizes laboratory animals must be reviewed and approved by the Institutional Animal Care and Use Committee and verification submitted to the awarding institute. (If Vertebrate Animals are going to be used in the project, the application should follow the specific instructions for Vertebrate Animals. See:*

http://grants.nih.gov/grants/funding/phs398/section_1.html#f_vertebrate_animals

APPLICATION RECEIPT DATES AND REVIEW SCHEDULE

Receipt Date New, Competing continuation, supplemental and amended	**Initial Review Date**	**Council Review Date**	**Earliest Possible Start Date**
January 10	June/July	Sept/October	December 1
May 10	October/Nov	January/February	April 1
September 10	February/March	May/June	July 1

Ruth L. Kirschstein National Research Service Awards For Individual Postdoctoral Fellows-F32

Important Announcements:

NIH Guide: http://grants1.nih.gov/grants/guide/pa-files/PA-03-067.html

NCI website: http://cancertraining.nci.nih.gov/research/basicphd/f32.html

Purpose:

To provide postdoctoral candidates with supervised basic cancer research experience in order to become productive, independent investigators.

Eligibility:

- **Candidates must be U.S. citizens, non-citizen nationals, or permanent residents of the U.S. at the time of award.**
- **Candidates must have an earned research or health professional doctoral degree (PhD, MD, DO, DC, DDS, DVM, OD, DPM, ScD, EngD, DrPH, PharmD, DSW, PsyD, or equivalent from an accredited domestic or foreign institution) before the award can be activated.**
- **Candidates must identify a sponsoring institution and an individual who will serve as sponsor/mentor.**
- **Candidates are required to pursue their research training on a full-time basis, devoting at least 40 hours per week to the training program.**

Period of Support: Up to 3 years, not renewable. Training beyond 3 years may be allowed under exceptional circumstances, but a waiver from the NCI Program Staff is required.

Allowable Support:

- **Trainee stipends (FY2003): $34,200 to $50,808 based on years of relevant experience (teaching, internship, residency, clinical duties, studies in a health-related field, and research in industry).**
- **Institutional Allowance (FY2003) (research supplies, equipment, health insurance, travel)**
  - **Non-Federal public and private institutions: $5,500 per year**
  - **Federal and for-profit institutions: $4,400 per year**
- **Tuition and fees.**

Special Features:

- **Recipients may receive their training at a domestic or foreign institution, in industry, or in a Federal government research facility.**
- **F32 award is made directly to the applicant and not to a sponsoring institution, when working at a Federal facility or foreign institution. Requires payback (There is a service obligation of 1 month for each month of support during the first 12 months of support. The 13th and subsequent months of support are acceptable payback service.)**
- **F32 awards may not be held concurrently with other federally-sponsored fellowships or similar Federal awards that provide a stipend or otherwise duplicates provisions of this award.**

NCI Contact: Nancy Lohrey (nlohrey@mail.nih.gov)

Review Criteria – F32

The review criteria focus on four main components:

- **Candidate: An assessment of the candidate's previous academic and research performance and the potential to become an important contributor to biomedical, behavioral or clinical science.**

- **Sponsor and Training Environment: An assessment of the quality of the training environment and the qualifications of the sponsor as a mentor for the proposed research training experience.**

- **Research Proposal: The merit of the scientific proposal and its relationship to the candidate's career plans.**

- **Training Potential: An assessment of the value of the proposed fellowship experience as it relates to the candidate's needs in preparation for a career as an independent researcher.**

APPLICATION RECEIPT DATES AND REVIEW SCHEDULE

Application Receipt Date (new and Amended)	Initial Review Date	Council Review Date	Earliest Possible Start Date
April 5	June/July	September/October	December 1
August 5	October/November	January/February	April 1
December 5	February/March	May/June	July 1

Mentored Clinical Scientist Development Award - K08

Important Announcements:

NIH Guide: http://grants.nih.gov/grants/guide/pa-files/PA-00-003.html

NCI website: http://cancertraining.nci.nih.gov/research/basicmd/k08full.html

Purpose:

To support the career development and research training of individuals with a health professional doctoral degree (e.g., M.D.'s, D.O's, D.V.M.'s, Pharm.D.'s, Ph.D.'s in nursing) committed to a career in laboratory or field-based research. This award may also be used to support a laboratory focused career development and research training experience in translational research. (Translational research uses knowledge of human biology to develop and test the feasibility of cancer-relevant interventions in humans and/or determines the biological basis for observations made in individuals with cancer or in populations at risk for cancer.)

Eligibility:

- **Applications must be submitted, on behalf of the candidate, by domestic non-Federal organizations, public or private, such as medical schools or other institutions of higher education.**
- **Candidates must be U.S. citizens, non-citizen nationals, or permanent residents of the U.S. at the time of award.**
- **Candidates must have a clinical doctoral degree or its equivalent (e.g. MD, DDS, DMD, DO, DVM, PharmD, nursing PhD). Individuals with a clinical Ph.D. degree (e.g., clinical psychology, clinical genetics, pathology) are also eligible. The NCI does not require candidates to have post-graduate clinical training (i.e., Board eligibility).**
- **Candidates must identify a sponsor/mentor with extensive research experience to oversee and supervise the candidate's research training.**
- **Candidates must commit a minimum of 75% of full-time professional effort to conducting research and research career development.**
- **Former principal investigators on NIH Small Grants (R03) or Exploratory/Developmental Grants (R21) are eligible to apply. However, former principal investigators on NIH research project grants (R01), FIRST Awards (R29), comparable career development awards (e.g., K01, K07, K08, K23, non-federal career development awards), subprojects on Program Project Grants (P01) or center grants (P50) and equivalent are NOT ELIGIBLE.**

Period of Support: Up to 5 years, not renewable.

Allowable Costs:

- **Salary: Up to $75,000 plus fringe benefits**
- **Research Development Support: Up to $30,000 (covers such items as tuition, fees, books, research expenses, travel, statistical and computational services, etc.)**

NCI Contacts: David Eckstein (Eckstein@mail.nih.gov), Lester S. Gorelic (gorelicl@mail.nih.gov) and Nancy Lohrey (nlohrey@mail.nih.gov)

Review Criteria – K08

Candidate:

- **Quality of the candidate's academic and clinical record.**
- **Potential to develop as an independent researcher.**
- **Commitment to a research career.**

Career Development Plan:

- **Appropriateness of the career development plan for the candidate to achieve scientific independence.**
- **Consistency of the plan with the candidate's previous training and career goals.**

Training in the Responsible Conduct of Research:

- **Quality of the proposed training in the responsible conduct of research.**

Research Plan:

- **Scientific and technical merit of the research question, design and methodology.**
- **Relevance of the proposed research to the candidate's career objectives.**
- **Appropriateness of the research plan as a vehicle for developing the candidate's research skills.**

Mentor/Co-Mentor:

- **Appropriateness of the mentor's research qualifications in the area of the research.**
- **Quality and extent of the mentor's proposed role in providing guidance and advice to the candidate.**
- **Previous experience in fostering the development of researchers.**
- **History of research productivity, and adequacy of support for the proposed research.**

APPLICATION RECEIPT DATES AND REVIEW SCHEDULE

Receipt Date New	Receipt Date Amended	Initial Review Date	Council Review Date	Earliest Possible Start Date
February 1	March 1	June/July	Sept/October	December 1
June 1	July 1	October/Nov	January/February	April 1
October 1	November 1	February/March	May/June	July 1

NCI Howard Temin Award - K01

Important Announcements:

NIH Guide: http://grants.nih.gov/grants/guide/pa-files/PAR-03-104.html

NCI website http://cancertraining.nci.nih.gov/research/basicphd/k01full.html

Purpose:

To encourage basic scientists to focus their research on human cancer and to bridge the transition of these scientists from a mentored postdoctoral research environment to an independent cancer research career.

Eligibility:

- **Applications must be submitted, on behalf of the candidate, by domestic non-Federal organizations, public or private, such as medical schools or other institutions of higher education.**
- **Candidates must be U.S. citizens, non-citizen nationals, or permanent residents of the U.S. at the time of award.**
- **Candidates must have a research or a health professional doctorate or its equivalent, must have completed at least three years of postdoctoral research at the time of award, and must have demonstrated highly productive research activity and potential for establishing an independent research program.**
- **Candidates must identify an individual who can serve as a mentor for the initial mentored phase.**
- **Candidates must propose a research and career development plan for establishing an independent basic research program directly relevant to human cancer.**
- **Candidates must commit a minimum of 75% of full-time professional effort to conducting research and research career development.**
- **Former principal investigators on NIH Small Grants (R03), Exploratory/ Developmental Grants (R21), or recipients of comparable career development awards (e.g., K07, K08, K23) who are in their last two years of support, are eligible to apply. However, former principal investigators on NIH research project grants (R01), FIRST Awards (R29), subprojects on Program Project Grants (P01) or center grants (P50) and equivalent are NOT ELIGIBLE.**

Period of Support: Up to 5 years (1 to 3 years in mentored phase, rest in independent phase), not renewable.

Allowable Costs:

- **Salary: Up to $75,000 plus fringe benefits.**
- **Research Development Support: Up to $30,000 during the mentored phase; $50,000 during the independent phase (covers such items as tuition, fees, books, research expenses, travel, research support services (including personnel and computer time).**

NCI Contact: David Eckstein (Eckstein@mail.nih.gov)

Review Criteria K01- (Howard Temin Award)

Candidate:

- **Strength of the candidate's commitment to a research career that focuses on problems directly relevant to human biology.**
- **Evidence of the candidate's interaction and collaboration with other scientists.**
- **Quality and strength of the candidate's prior scientific training and experience.**
- **Strength of the recommendations from three well-established scientists attesting to the candidate's potential.**
- **Likelihood that the career development plan will contribute substantially to the candidate's scientific development.**
- **Appropriateness of the proposed duration of the mentored and unmentored phases.**
- **Adequacy of prior or proposed training in the responsible conduct of research.**

Statements by Mentor, Co-Mentor(s), Consultant(s), and Collaborator(s):

- **Qualifications of the mentor(s) in the area of the proposed research and the mentor's experience in human cancer research.**
- **Quality, nature and extent of the mentor's previous experience in training successful cancer researchers.**
- **Quality, nature and extent of the supervision that will occur during the mentored phase.**
- **Adequacy of existing peer-reviewed research of the mentor(s) to provide a funded environment for the mentored phase.**
- **Adequacy of the statement describing what aspects of the Research Plan will remain with and facilitate the transition phase.**
- **Adequacy of similar information provided by any co-mentor.**
-

Environment and Institutional Commitment:

- **Quality of the environment for the candidate's scientific and professional development.**
- **Adequacy of research facilities.**
- **Adequacy of the institution's track record in the conduct of human cancer research.**
- **Assurance that the investigator will spend a minimum of 75 percent effort on the plan, with the remaining effort devoted to activities related to the development of a successful research career.**

Research Plan:

- **Degree of relevance to the research plan for human cancer research.**
- **Originality and quality of the research hypothesis, design and methodology as related to the candidate's previous training.**
- **Potential of the research plan to help the candidate develop into an independent career directly relevant to human cancer research.**

APPLICATION RECEIPT DATES AND REVIEW SCHEDULE

Receipt Date New	Receipt Date Amended	Initial Review Date	Council Review Date	Earliest Possible Start Date
February 1	March 1	June/July	Sept/October	December 1
June 1	July 1	October/Nov	January/February	April 1
October 1	November 1	February/March	May/June	July 1

Transdisciplinary

Mentored Quantitative Research Career Development Award - K25

Important Announcements:

NIH Guide: http://grants1.nih.gov/grants/guide/pa-files/PA-02-127.html

NCI Website: http://cancertraining.nci.nih.gov/research/translational/translational.html

Purpose:

To encourage research-oriented quantitative scientists and engineers with little or no experience in biology or biomedicine to develop independent research skills and gain experience that will allow them to conduct basic or clinical biomedical, behavioral or bioengineering research, or to play leading roles in multi-disciplinary research teams.

Eligibility:

- **Applications must be submitted, on behalf of the candidate, by domestic organizations, public or private, such as research foundations/institutions, commercial entities, medical schools or other institutions of higher education or Federal laboratories (except for laboratories of the NIH).**
- **Candidates must be U.S. citizens, non-citizen nationals, or permanent residents of the U.S. at the time of award.**
- **Candidates must have demonstrated research interests with an advanced degree in a quantitative area of science or engineering: M.S.E.E., Ph.D., D.Sc., etc. Backgrounds appropriate for this award include, but are not limited to: mathematics, statistics, computer science, informatics, physics, chemistry, and engineering.**
- **Candidates must identify a mentor with extensive behavioral or biomedical research experience.**
- **Candidates must be willing to spend at least 75 percent of full-time professional effort conducting research career development and basic or clinical research.**
- **Former principal investigators on NIH Small Grants (R03) or Exploratory/Developmental Grants (R21) are eligible to apply. However, former principal investigators on NIH research project grants (R01), FIRST Awards (R29), comparable career development awards (e.g., K01, K08, K23), subprojects on Program Project Grants (P01) or center grants (P50) and equivalent are NOT ELIGIBLE.**

Period of Support: Up to 5 years (with a minimum of 3 years), not renewable.

Allowable Costs:

- **Salary: Up to $75,000 plus fringe benefits.**
- **Research Development Support: Up to $40,000 (covers such items as tuition, fees, books, research expenses, travel, research support services (including personnel and computer time).**

NCI Contact: David Eckstein (Eckstein@mail.nih.gov)

Review Criteria-K25

Candidate:

- **Quality of the academic and research record**
- **Potential to become an independent quantitative biomedical or bioengineering researcher or to play a role in multi-disciplinary research teams.**
- **Commitment to a career in quantitative biomedical or bioengineering research**

Career Development Plan:

- **Likelihood that the career development plan will contribute substantially to the candidate's scientific development.**
- **Appropriateness of the proposed didactic and research phases**
- **Consistency of the career development plan with the candidate's career goals and prior research training experience**
- **Quality of the proposed training in responsible conduct of research**

Research Plan:

- **Appropriateness of the research plan to the candidate's stage of research development.**
- **Scientific and technical merit of the research question, design and methodology.**
- **Relevance of the proposed research to the candidate's career objectives.**
- **Where appropriate, adequacy of plans for inclusion of minorities, women and children.**

Mentor:

- **History of research productivity and support in research.**
- **Appropriateness of the mentor's research qualifications in the area of this application.**
- **Quality and extent of the mentor's proposed role in providing guidance and advice to the candidate.**
- **Previous experience in fostering the development of researchers.**

Institutional Environment and Commitment:

- **Evidence of institutional commitment to the candidate's scientific development and that the institution intends for the candidate to be integral to the research program.**
- **Adequacy of research facilities and training opportunities**
- **Quality and appropriateness of environment.**
- **Institutional commitment to an appropriate balance of research and other responsibilities.**

Budget:

- **Adequacy of justification in relation to goals and research aims.**

APPLICATION RECEIPT DATES AND REVIEW SCHEDULE

Receipt Date New	Receipt Date Amended	Initial Review Date	Council Review Date	Earliest Possible Start Date
February 1	March 1	June/July	Sept/October	December 1
June 1	July 1	October/Nov	January/February	April 1
October 1	November 1	February/March	May/June	July 1

NCI Transition Career Development Award - K22

Important Announcements:

NIH Guide: **http://grants2.nih.gov/grants/guide/pa-files/PAR-04-040.html**

NCI Website: http://cancertraining.nci.nih.gov/research/basicmd/k22full.html

Purpose:

To facilitate the transition of investigators from the mentored to independent stage of their careers in cancer research by providing "protected time" to develop their initial cancer research programs.

Eligibility:

- **Applications must be submitted, on behalf of the candidate, by domestic organizations, public or private, such as research foundations/institutions, commercial entities, medical schools or other institutions of higher education or Federal laboratories.**
- **Candidates must be U.S. citizens, non-citizen nationals, or permanent residents at the time of award.**
- **Candidates must be doctoral degreed individuals who have been educated as clinicians (e.g. M.D.s, Oncology Nurses) or as prevention, control and population scientists (e.g., PhDs, DPHs, M.D.s) and are ready to pursue independent careers in cancer research. NIH intramural scientists may apply, but they must be pursuing a career in research directly relevant to human cancer and have at least three years of mentored postdoctoral experience at the time of award.**
- **At time of application, candidates must be in a "mentored" cancer research postdoctoral position and have completed TWO YEARS OR MORE of research, or be in a suitable independent position for LESS THAN TWO YEARS with continuous previous postdoctoral cancer research training.**
- **Candidates in a postdoctoral position are eligible to apply for an NCI Transition Career Development Award (K22) WITHOUT an institutional affiliation and may transition to independence at their current institution. If an award is made, candidates will have one year to locate appropriate independent position.**
- **Candidate must be able to commit a minimum of 75% of professional effort to the research and research career development objectives of the award.**
- **Candidate must submit an R01 (or equivalent) research grant application to the NIH or equivalent funding organization prior to the end of the second year of support.**
- **Recipients of K23, K08, Howard Temin or equivalent awards, former or current principal investigators of Small Grants (R03), exploratory/developmental grants (R21) or equivalent grants are eligible, BUT former or current principal investigators on NIH research project grants, (e.g., R01) or equivalent peer reviewed grants or project leaders of subprojects of Program Project Grants (P01) or center grants (P50) and equivalent are NOT ELIGIBLE.**

Period of Support: Up to 3 years, not renewable.

Allowable costs:

- **Salary: Up to $75,000 plus fringe benefits.**
- **Research Development Support: Up to $50,000 (covers such items as tuition, fees, books, research expenses, travel, research support services (including personnel and computer time).**

NCI Contact: David Eckstein (Eckstein@mail.nih.gov)

Review Criteria-K22

Candidate:

- **(For those in independent positions) Suitability of the position for the candidate to pursue an independent research career.**
- **Quality of the mentored period of cancer research training.**
- **Scientific productivity during the mentored period.**
- **Potential ability to manage an independent research project.**
- **Ability to interact and collaborate with other scientists.**
- **The potential for the candidate to become an independent investigator during this 3-year award.**
- **Strength of letters of reference on behalf of the candidate.**

Research Plan:

- **Originality, innovativeness and scientific merit, relative to the experience level of applicant.**
- **Extent to which plan goes beyond the mentored environment.**
- **Medical and/or health significance to cancer.**
- **Where appropriate, adequacy of inclusion plans for minorities, women and children.**
- **Where appropriate, adequacy of inclusion plans for protection of humans or animals.**

Budget:

- **Adequacy of justification in relation to goals and research aims.**

APPLICATION RECEIPT DATES AND REVIEW SCHEDULE

Receipt Date New	Receipt Date Amended	Initial Review Date	Council Review Date	Earliest Possible Start Date
February 1	March 1	June/July	Sept/October	December 1
June 1	July 1	October/Nov	January/February	April 1
October 1	November 1	February/March	May/June	July 1

Cancer Education Grant Program – R25E

Important Announcements:

NIH Guide: **http://grants1.nih.gov/grants/guide/pa-files/PAR-03-093.html**

NCI Website: **http://cancertraining.nci.nih.gov/cancerEd/cancered.html**

Purpose:

To develop and sustain innovative educational approaches that ultimately will contribute to the decrease of cancer incidence, morbidity, and mortality, and to the improvement of the quality of life of cancer survivors.

Eligibility:

- **Domestic for profit or non-profit organizations.**
- **Principal investigator is the program leader and must be an expert in the field of choice.**

Period of Support:

- **The grant is not renewable if used to develop an academic curriculum for new education approaches, which the institution should standardize and assume the responsibility for beyond the 5-year project period. Examples of such programs are education programs in pain management ant palliative care, development of nutrition curriculum in academic institutions, etc. In such cases, the applicant institution is expected to continue the program beyond the 5-year project period.**

- **The grant is renewable for programs designed to stabilize and strengthen activities for the long term (e.g., short-term research experiences to motivate medical, nursing, public health and other health professionals to pursue cancer research careers).**

Allowable Costs: Up to $300,000.

NCI Contact: Mary C. Blehar (mblehar@mail.nih.gov)

General Review Criteria-R25E

Cancer Education Program:

- **Novelty and significance of the education program to cancer research and/or to the reduction of cancer incidence, morbidity, and mortality and to the improvement of life of cancer survivors.**
- **Quality of the program leader in terms of past track record of achievement and experience to provide direction, coordination and administration of the Program.**
- **Quality of the key personnel.**
- **Overall quality and adequacy of the program design.**
- **Adequacy of plans for recruitment and retention of program participants, including women and participants from underrepresented racial/ethnic groups.**
- **Degree of applicability and portability of the proposed program to others.**
- **Adequacy of the required 'Evaluation Plan.'**
- **Adequacy of the 'Dissemination Plan.'**
- **Adequacy of plans to continue the Program after the period of Federal grant support.**

Additional Review Criteria for Specific Types of R25E Programs:

For programs involving curriculum development:

- **Adequacy of the institutional commitment to continuing the Program after the period of grant support ends.**
- **For competing renewal applications, adequacy of justification for continued support.**

For education programs involving short-term experiences:

- **Adequacy of the faculty commitment to the program.**
- **Adequacy of the research support base and the educational environment.**
- **Adequacy of the candidate pool size.**
- **Appropriateness of candidate recruitment plans including plans for recruitment of minority candidates.**
- **Potential for impacting the participant's choice of a research career in cancer.**
- **Potential for attracting participants back for repeated short-term appointments.**
- **Adequacy of plans for evaluating the impact of the training experience on the research careers of the participants.**

APPLICATION RECEIPT DATES AND REVIEW SCHEDULE

Receipt Date New	Receipt Date Amended	Initial Review Date	Council Review Date	Earliest Possible Start Date
February 1	March 1	June/July	Sept/October	December 1
June 1	July 1	October/Nov	January/February	April 1
October 1	November 1	February/March	May/June	July 1

Career Track:
Clinical Science-Patient-Oriented Research

Paul Calabresi Award for Clinical Oncology – K12

Important Announcements:

NIH Guide: http://grants.nih.gov/grants/guide/pa-files/PAR-04-096.html

NCI website: http://cancertraining.nci.nih.gov/research/clinical/k12.html

Purpose:

To support institutional programs for training medical doctors and doctoral degreed Oncology Registered Nurses pursuing careers in patient-oriented research to communicate and collaborate with basic/behavioral scientists in the design and testing of innovative and hypothesis-based cancer clinical protocols and to manage all phases of cancer clinical trials research. The program is intended to train a clinical scientist, NOT a basic scientist, to participate in translational research.

Eligibility:

- **Domestic for profit or non-profit sponsoring institution.**
- **Principal investigator is the program leader and must be an established investigator.**
- **Program must use an Advisory Committee for program oversight.**
- **Program must involve staff and trainees representing at least 2 oncology disciplines.**
- **Program must have basic AND clinical didactic AND research core requirements that each trainee must satisfy.**
- **Trainees must be U.S. citizens or non-citizen nationals or must have permanent residency status.**
- **Trainees must be physicians holding the M.D. or D.O. degree or be doctoral degreed registered nurses and must have completed their clinical training. Physicians must be Board eligible.**
- **Trainees must have a full-time position and be able to commit 75% of professional effort to the research and career development objectives of the award.**

Period of Support: Grant: Up to 5 years, renewable. Trainees: minimum of 2 years, up to 7 years.

Allowable Costs:

- **Grant: $700K cap per year/ 8% indirect costs.**
- **Trainees: Up to $75,000/ year for salary, $30,000/ year for research costs (covers such items as tuition, fees, books, research expenses, travel, statistical and computational services, etc)**

NCI Contact: Lester S. Gorelic (gorelicl@mail.nih.gov)

Review Criteria –K12

- **Principal Investigator: Qualifications (and track record for competing renewal applications) of the PI to provide both scientific and administrative leadership of the Program.**

- **Advisory Committee: Quality (and track record for competing renewal applications) of the Advisory Committee and appropriateness for performing its critical functions in recruitment of candidates, assignment of mentors, establishment and monitoring of individual training plans, and evaluating and making mid-course corrections for the Program.**

- **Program/Core Requirements: Merit of the Program (and track record for competing renewal applications), as defined in the didactic core requirements, basic research core requirements, and clinical core requirements, to train patient-oriented clinical scientists who can collaborate effectively with basic scientists in translational research.**

- **Environment: Quality, sufficiency and interactiveness of the basic and clinical research of the institution to provide the environment necessary for the Program to meet its goals and objectives.**

- **Mentors: Experience and quality of the mentors to ensure a successful outcome of the Program.**

- **Candidates: Adequacy of plans for (and track record for completing renewal applications) recruiting high quality trainees for the Program representing at least two oncology disciplines.**

- **Institutional Commitment: Strength of the institution's commitment to the Program, especially with regard to ensuring that each candidate will have protected time to commit 75 percent effort to research career development.**

APPLICATION RECEIPT DATE AND REVIEW SCHEDULE

Application Receipt Date	Initial Review Date	Council Review Date	Earliest Possible Start Date
May 1 – Letter of Intent (LOI). An LOI is not required, but is encouraged.			
June 1	September/October	January/February	April 1

Mentored Patient-Oriented Research Career Development Award – K23

Important Announcements:

NIH Guide: http://grants.nih.gov/grants/guide/pa-files/PA-00-004.html

NCI website: http://cancertraining.nci.nih.gov/research/clinical/k23.html

Purpose:

To support the training of clinically trained professionals who have made a commitment to focus on patient-oriented research. For the purpose of this award, patient-oriented is research conducted with human subjects (or on material of human origin such as tissues, specimens, and cognitive phenomena) for which an investigator interacts directly with human subjects. This award may also be used to support a patient-oriented research focused career development and research training experience in translational research. (Translational research uses knowledge of human biology to develop and test the feasibility of cancer-relevant interventions in humans AND/OR determines the biological basis for observations made in individuals with cancer or in populations at risk for cancer.)

Eligibility:

- **Applications must be submitted, on behalf of the candidate, by domestic non-Federal organizations, public or private, such as medical schools or other institutions of higher education**.
- **Candidates must be U.S. citizens, non-citizen nationals, or permanent residents of the U.S. at the time of award.**
- **Candidates must have a clinical doctoral degree or its equivalent (M.D., D.O., Pharm.D., etc.) or a clinical Ph.D. degree (viz., nursing, clinical psychology, clinical genetics).**
- **Candidates must have completed all their clinical training prior to receiving an award.**
- **Candidates must identify a sponsor/mentor with extensive research experience to oversee and supervise the candidate's research training.**
- **Candidates must commit a minimum of 75% of full-time professional effort to conducting research and research career development.**
- **Former principal investigators on NIH Small Grants (R03) or Exploratory/Developmental Grants (R21) are eligible to apply. However, current or former principal investigators on NIH research project grants (R01), FIRST Awards (R29), comparable career development awards (e.g., K01, K07, K08, K23, non-federal career development awards), subprojects on Program Project Grants (P01) or center grants (P50) and equivalent are NOT ELIGIBLE**.

Period of Support: Up to 5 years, not renewable.

Allowable Costs:

- **Salary: Up to $75,000 plus fringe benefits.**
- **Research Development Support: Up to $30,000 (covers such items as tuition, fees, books, research expenses, travel, statistical and computational services, etc.)**

NCI Contact: Lester S. Gorelic (gorelicl@mail.nih.gov)

Review Criteria – K23

Candidate:

- **Quality of the candidate's academic and clinical records.**
- **Potential for the candidate to develop as an independent clinical researcher.**
- **Commitment to a career in patient-oriented research.**

Career Development Plan:

- **Likelihood that the career development plan will contribute substantially to the candidate's scientific development.**
- **Appropriateness of the content and duration of the proposed didactic and research phases of the program.**
- **Consistency of the career development plan with the candidate's career goals and prior research experience.**

Training in the Responsible Conduct of Research:

- **Quality of the proposed training in the responsible conduct of research.**

Research Plan:

- **Scientific and technical merit of the research question, design and methodology.**
- **Relevance of the proposed research to the candidate's career objectives.**
- **Appropriateness of the research plan to the state of the candidate's research development.**

Mentor/Co-Mentor:

- **Appropriateness of the mentor's research qualifications in the area of this application.**
- **Quality and extent of mentor's proposed role in providing guidance and advice to the candidate.**
- **Previous experience in fostering the development of more junior researchers.**
- **History of research productivity and support**
- **Adequacy of support for the proposed research project.**

Environment and Institutional Commitment:

- **Adequacy of research facilities and the availability of appropriate educational opportunities.**
- **Quality and relevance of the environment for the candidate's scientific and professional development.**
- **Institution's commitment to the candidate's scientific development and that the candidate will be an integral part of the research program.**
- **Commitment to an appropriate balance of research and clinical responsibilities.**

APPLICATION RECEIPT DATES AND REVIEW SCHEDULE

Receipt Date New	Receipt Date Amended	Initial Review Date	Council Review Date	Earliest Possible Start Date
February 1	March 1	June/July	Sept/October	December 1
June 1	July 1	October/Nov	January/February	April 1
October 1	November 1	February/March	May/June	July 1

NCI Established Investigator Award in Patient-Oriented Research K24

Important Announcements:

NIH Guide: http://grants.nih.gov/grants/guide/pa-files/PA-04-107.html

NCI website: http://cancertraining.nci.nih.gov/research/clinical/k24full.html

Purpose:

To provide clinicians protected time to devote to patient-oriented research and to act as mentors for beginning clinical investigator. For the purpose of this award, patient-oriented research is research conducted with human subjects (or on material of human origin such as tissues, specimens, and cognitive phenomena) for which an investigator interacts directly with human subjects.

Eligibility:

- **Applications must be submitted, on behalf of the candidate, by domestic non-Federal organizations, public or private, such as medical schools or other institutions of higher education.**
- **Candidates must be U.S. citizens, non-citizen nationals, or permanent residents of the U.S. at the time of award.**
- **Health professional doctoral degree or its equivalent. Such degrees include but are not limited to the M.D., D.O., D.D.S., D.M.D., O.D., Pharm.D., N.D. (Doctor of Naturopathy), as well as doctoral degreed nurses. Individuals holding the Ph.D. degree are eligible if they normally perform clinical duties.**
- **Must have completed specialty training and obtained the necessary certifications to practice medicine within approximately 15 years of submitting the application.**
- **Must have active independent support either Federal or private for patient-oriented research as either NIH awards or awards equivalent to NIH peer-reviewed research support at the time of application. This would not include industry support.**
- **Must have a track record of mentoring junior investigators.**
- **Able to commit up to 50% (at least 25%) of professional effort to the research and mentoring objectives of the award.**
- **Commitment of the sponsoring institution to the candidate's career and to providing the required release time.**

Period of Support: Up to 5 years, one-time renewable.

Allowable Costs:

- **Salary: Up to the maximum legislated salary rate for Federal workers at the time of award and based on actual percent effort, plus fringe benefits.**
- **Research Development Support: Up to $25, 000/yr. (covers items such as supplies, equipment and technical personnel for the principal investigator and his/her mentored clinical investigators; travel to research meetings or training; statistical services including personnel and computer time).**

NCI Contact: Lester S. Gorelic (gorelicl@mail.nih.gov)

Review Criteria – K24

Candidate:

- **Quality of academic and clinical record including potential for or track record of mentoring.**
- **Evidence of ongoing high quality patient-oriented research and the relationship of that research to this program.**
- **Potential to conduct quality patient-oriented research.**
- **Appropriateness of the content and duration of the proposed research program.**
- **Track record of conducting high quality patient-oriented research (POR) and obtaining monetary support for this research.**
- **Commitment to a continuing career in POR.**

Research Plan:

- **Scientific and technical merit.**
- **Appropriateness for training prospective mentees in POR.**
- **Relevance to applicant's career objectives.**
- **Adequacy of resources.**
- **Adequacy for providing additional time to devote to POR.**
- **Adequacy of inclusion plans for minorities, women and children.**

Mentoring Plan:

- **Experience and potential to serve as a mentor.**
- **Adequacy of the plans for mentoring or supervising beginning clinicians in POR.**
- **Appropriateness of the proposed level of effort committed to the mentoring component.**

Environment/Institutional Commitment:

- **Adequacy of research facilities and educational opportunities for pursuing POR, commitment to scientific development of applicant, and commitment to provide protected time.**

APPLICATION RECEIPT DATES AND REVIEW SCHEDULE

Receipt Date New	Receipt Date Competing Continuation, Supplement, Amended	Initial Review Date	Council Review Date	Earliest Possible Start Date
February 1	March 1	June/July	Sept/October	December 1
June 1	July 1	October/Nov	January/February	April 1
October 1	November 1	February/March	May/June	July 1

NCI Transition Career Development Award - K22

Important Announcements:

NIH Guide: http://grants2.nih.gov/grants/guide/pa-files/PAR-04-040.html

NCI Website: http://cancertraining.nci.nih.gov/research/clinical/k22.html

Purpose:

To facilitate the transition of investigators from the mentored to independent stage of their careers in cancer research by providing "protected time" to develop their initial cancer research programs.

Eligibility:

- **Applications may be submitted without institutional affiliation; or on behalf of the candidate by domestic organizations, public or private, such as research foundations/institutions, commercial entities, medical schools or other institutions of higher education or Federal laboratories.**
- **Candidates must be U.S. citizens, non-citizen nationals, or permanent residents of the U.S. at the time of award.**
- **Candidates must be doctoral degreed individuals who have been educated as clinicians (e.g. M.D.s, Oncology Nurses) and are ready to pursue independent careers in cancer research. NIH intramural scientists may apply, but they must be pursuing a career in research directly relevant to human cancer and have at least three years of mentored postdoctoral experience at the time of award.**
- **At time of application, candidates must be in a "mentored" cancer research postdoctoral position and have completed TWO YEARS OR MORE of research, or be in a suitable independent position for LESS THAN TWO YEARS with continuous previous postdoctoral cancer research training.**
- **Candidates in a postdoctoral position may transition to independence at their current institution. If an award is made, candidates will have one year to locate to an appropriate independent position.**
- **Candidate must be able to commit a minimum of 75% of professional effort to the research and research career development objectives of the award.**
- **Candidate must submit an R01 (or equivalent) research grant application to the NIH or equivalent funding organization prior to the end of the second year of support.**
- **Recipients of K23 or equivalent awards, former or current principal investigators of Small Grants (R03), developmental grants (R21) or equivalent grants are eligible, BUT former or current principal investigators on NIH research project grants, (e.g., R01) or equivalent peer reviewed grants or project leaders of subprojects of Program Project Grants (P01) or center grants (P50) and equivalent are NOT ELIGIBLE.**

Period of Support: Up to 3 years, not renewable.

Allowable Costs:

- **Salary: Up to $75,000 plus fringe benefits.**
- **Research Development Support: Up to $50,000 (covers such items as tuition, fees, books, research expenses, travel, research support services (including personnel and computer time)**

NCI Contact: Lester Gorelic (gorelic@mail.nih.gov)

Review Criteria-K22

Candidate:

- **(For those in independent positions) Suitability of the position for the candidate to pursue an independent research career.**
- **Quality of the mentored period of cancer research training.**
- **Scientific productivity during the mentored period.**
- **Potential ability to manage an independent research project.**
- **Ability to interact and collaborate with other scientists.**
- **The potential for the candidate to become an independent investigator during this 3-year award.**
- **Strength of letters of reference on behalf of the candidate.**

Research Plan:

- **Originality, innovativeness and scientific merit, appropriateness to experience level of applicant.**
- **Extent to which plan goes beyond the mentored environment.**
- **Medical and/or health significance to cancer.**
- **Where appropriate, adequacy of inclusion plans for minorities, women and children.**
- **Where appropriate, adequacy of plans for protection of humans or animals.**

Budget:

- **Adequacy of justification in relation to goals and research aims.**

APPLICATION RECEIPT DATES AND REVIEW SCHEDULE

Receipt Date New	Receipt Date Amended	Initial Review Date	Council Review Date	Earliest Possible Start Date
February 1	March 1	June/July	Sept/October	December 1
June 1	July 1	October/Nov	January/February	April 1
October 1	November 1	February/March	May/June	July 1

Cancer Education Grant Program – R25E

Important Announcements:

NIH Guide: **http://grants1.nih.gov/grants/guide/pa-files/PAR-03-093.html**

NCI Website: **http://cancertraining.nci.nih.gov/cancerEd/cancered.html**

Purpose:

To develop and sustain innovative educational approaches that ultimately will contribute to the decrease of cancer incidence, morbidity, and mortality, and to the improvement of the quality of life of cancer survivors.

Eligibility:

- **Domestic for profit or non-profit organizations.**
- **Principal investigator is the program leader and must be an expert in the field of choice.**

Period of Support:

- **The grant is not renewable if used to develop an academic curriculum for new education approaches, which the institution should standardize and assume the responsibility for beyond the 5-year project period. Examples of such programs are education programs in pain management ant palliative care, development of nutrition curriculum in academic institutions, etc. In such cases, the applicant institution is expected to continue the program beyond the 5-year project period.**

- **The grant is renewable for programs designed to stabilize and strengthen activities for the long term (e.g., short-term research experiences to motivate medical, nursing, public health and other health professionals to pursue cancer research careers).**

Allowable Costs: **Up to $300,000.**

NCI Contact: **Mary C. Blehar (**mblehar@mail.nih.gov**)**

General Review Criteria-R25E

Cancer Education Program:

- **Novelty and significance of the education program to cancer research and/or to the reduction of cancer incidence, morbidity, and mortality and to the improvement of life of cancer survivors.**
- **Quality of the program leader in terms of past track record of achievement and experience to provide direction, coordination and administration of the Program.**
- **Quality of the key personnel.**
- **Overall quality and adequacy of the program design.**
- **Adequacy of plans for recruitment and retention of program participants, including women and participants from underrepresented racial/ethnic groups. Degree of applicability and portability of the proposed program to others.**
- **Adequacy of the required 'Evaluation Plan.'**
- **Adequacy of the 'Dissemination Plan.'**
- **Adequacy of plans to continue the Program after the period of Federal grant support.**

Additional Review Criteria for Specific Types of R25E Programs:

For programs involving curriculum development:

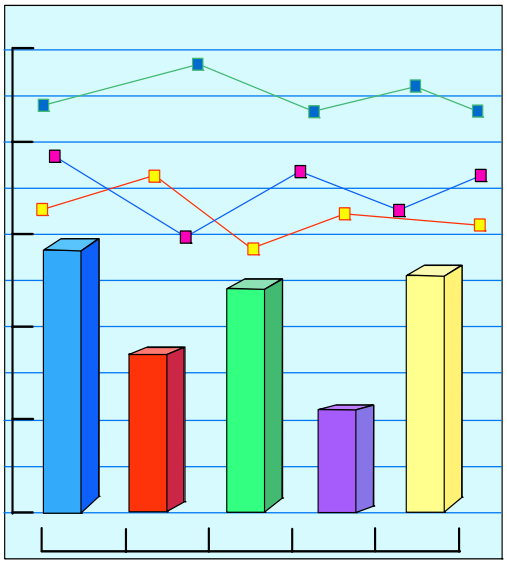
- **Adequacy of the institutional commitment to continuing the Program after the period of grant support ends.**
- **For competing renewal applications, adequacy of justification for continued support.**

For education programs involving short-term experiences:

- **Adequacy of the faculty commitment to the program.**
- **Adequacy of the research support base and the educational environment.**
- **Adequacy of the candidate pool size.**
- **Appropriateness of candidate recruitment plans including plans for recruitment of minority candidates.**
- **Potential for impacting the participant's choice of a research career in cancer.**
- **Potential for attracting participants back for repeated short-term appointments.**
- **Adequacy of plans for evaluating the impact of the training experience on the research careers of the participants.**

APPLICATION RECEIPT DATES AND REVIEW SCHEDULE

Receipt Date New	Receipt Date Amended	Initial Review Date	Council Review Date	Earliest Possible Start Date
February 1	March 1	June/July	Sept/October	December 1
June 1	July 1	October/Nov	January/February	April 1
October 1	November 1	February/March	May/June	July 1



Career Track: Cancer Prevention, Control, Behavior, and Population Sciences

Established Investigator Award in Cancer Prevention, Control, and Population Research - K05

Important Announcements:

NIH Guide: **http://grants.nih.gov/grants/guide/pa-files/PAR-03-149.html**

NCI website: **http://cancertraining.nci.nih.gov/research/prevention/k05.html**

Purpose:

To provide established investigators in cancer prevention, control, behavioral, and population sciences protected time for research and mentoring.

Eligibility:

- **Domestic for profit or non-profit sponsoring institution.**
- **Candidates must be U.S. citizens or non-citizen nationals or have permanent residency status.**
- **Candidates must be established CANCER scientists with a strong track record of publications and successful competition for cancer research support.**
- **Candidates must have independent research support equivalent to NIH peer-reviewed major grants at the time and during the entire duration of the award.**
- **Candidates must have a good mentoring record.**
- **Candidates must be able to commit 25% to 50% of professional effort to the research and mentoring objectives of the award.**
- **Commitment of the sponsoring institution to the candidate's research career.**

Period of Support: Up to 5 years, renewable.

Allowable Costs:

Salary up to the maximum salary rate in effect legislated by Congress for Federal workers at the time of the award, and based on actual percent effort. Up to $25,000 in direct costs per year for research and development expenses.

NCI Contact: Mary Blehar (mblehar@mail.nih.gov)

Review Criteria- K05

Candidate:

- **Quality of the candidate's academic and research record, and track record as a leader of a productive research program.**
- **Evidence of ongoing high-quality research in cancer prevention, control, behavioral or population sciences and the relationship of that research to the proposed K05 program.**
- **Strong track record of obtaining research support.**
- **A demonstrated record of mentoring or training investigators, or a demonstration of the capability to provide mentoring to junior investigators.**

Justification: **Demonstration that the proposed program and protected time will relieve the candidate of existing administrative (and perhaps clinical) duties to permit additional time for research and mentoring.**

Career and Research Plan:

- **Appropriateness of the research plan as a vehicle for developing and refining skills and capabilities in cancer prevention, control, behavioral, and population sciences research.**
- **Scientific and technical merit of the ongoing and newly proposed research.**
- **Likelihood of research contributing significantly to the scientific knowledge base.**
- **Appropriateness of the duration of the proposed research.**
- **Availability of adequate resources.**
- **Appropriateness of proposed level of effort committed to the Research Plan.**

Mentoring Plan:

- **Experience and potential of the candidate to serve as a mentor.**
- **Adequacy of the plans for mentoring or supervising junior investigators.**
- **Appropriateness of the proposed level of effort committed to the Mentoring Plan.**

Environment and Institutional Commitment:

- **Quality and relevance of the environment for scientific and professional development of the candidate.**
- **Adequacy of the applicant institution's commitment to provide protected time for conduct of the research and the mentoring programs and to the career development of the candidate.**

APPLICATION RECEIPT DATES AND REVIEW SCHEDULE

Receipt Date New	Receipt Date Competing Continuation, Supplements, Amended	Initial Review Date	Council Review Date	Earliest Possible Start Date
February 1	March 1	June/July	Sept/October	December 1
June 1	July 1	October/Nov	January/February	April 1
October 1	November 1	February/March	May/June	July 1

Cancer Prevention, Control and Population Sciences Career Development Award – K07

Important Announcements:

NIH Guide: http://grants.nih.gov/grants/guide/pa-files/PAR-04-055.html

NCI Website: http://cancertraining.nci.nih.gov/research/prevention/k07.html

Purpose:

To support the career development and research training of junior investigators committed to the field of cancer prevention, control, behavioral, and population sciences.

Eligibility:

- **Domestic for profit or non-profit sponsoring institution.**
- **Candidates must be U.S. citizens or non-citizen nationals or have permanent residency status.**
- **Candidates must have a Ph.D. degree, a health professional doctoral degree (M.D., DPH, D.D.S., D.O., D.V.M., Pharm.D., nursing PhD), or equivalent.**
- **Candidate's mentor must have a strong research and training track record and active research support.**
- **Candidates must have a full-time research or academic appointment in the sponsoring institution at the time of award.**
- **Candidate must be able to commit a minimum of 75% of professional effort to the K07 proposal.**
- **Commitment of the sponsoring institution to the candidate's research career.**
- **Former or current principal investigators of small grants (e.g., R03s, R21s) are eligible BUT former principal investigators on NIH research project grants (e.g., R01s), comparable career development awards (e.g., K01, K08, K23), subprojects on Program Project Grants (e.g., P01s) or center grants (e.g., P50s) and equivalent are NOT ELIGIBLE.**

Period of Support: **Up to 5 years, not renewable.**

Allowable Costs: **Up to $75,000 in salary plus fringe benefits and up to $30,000 in research costs.**

NCI Contact: **Lester Gorelic (gorelicl@mail.nih.gov**

Review Criteria-K07

Candidate:

- **Candidate's commitment to an academic career in cancer prevention, cancer control; epidemiology, or to the behavioral or population sciences as these disciplines relate to cancer prevention and control.**
- **Ability of the candidate to interact and collaborate with other scientists.**
- **Quality of the candidate's prior scientific training and experience.**
- **Recommendations of three well-established scientists attesting to the candidate's potential.**

Career Development Plan:

- **Likelihood that the plan will contribute substantially to the scientific development of the candidate.**
- **Appropriateness of the proposed activities for the grant period.**
- **Adequacy of the prior or proposed training in the responsible conduct of research.**

Research Plan:

- **Relevance of the research plan to developing an independent research program.**
- **Usefulness of the research plan for enhancing the candidate's research skills.**
- **Originality and quality of the research hypothesis, design and methodology.**

Mentor/Co-Mentor(s):

- **Appropriateness of the mentor's research qualifications in the area of the proposed research.**
- **Previous experience in fostering the development of cancer researchers.**
- **History of research productivity and peer-reviewed support.**
- **Adequacy of acting/pending support for the proposed research project.**

Environment and Institutional Commitment:

- **Institutional commitment to ensure that the candidate will devote a minimum of 75 percent effort directly related to research, with the remaining percent effort devoted to activities developing the research career.**
- **Adequacy of the facilities and training opportunities.**
- **Quality and relevance of the environment for the candidate's scientific and professional development.**

APPLICATION RECEIPT DATES AND REVIEW SCHEDULE

Receipt Date New	Receipt Date Amended	Initial Review Date	Council Review Date	Earliest Possible Start Date
February 1	March 1	June/July	Sept/October	December 1
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NCI Transition Career Development Award - K22

Important Announcements:

NIH Guide: http://grants2.nih.gov/grants/guide/pa-files/PAR-04-040.html

NCI website: http://cancertraining.nci.nih.gov/research/prevention/k22.html

Purpose:

To facilitate the transition of investigators from the mentored to the independent stage of their careers in cancer research by providing "protected time" to develop their initial cancer research programs.

Eligibility:

- **Applications must be submitted, on behalf of the candidate, by domestic organizations, public or private, such as research institutions, commercial entities, medical schools or other institutions of higher education, or Federal laboratories.**
- **Candidates in a postdoctoral position are eligible to apply for an NCI Transition Career Development Award (K22) WITHOUT an institutional affiliation. If an award is made, candidates will have one year to locate appropriate independent position.**
- **Candidates must be U.S. citizens, non-citizen nationals, or permanent residents of the U.S. at the time of award.**
- **Candidates must be doctoral degreed individuals who have been educated as clinicians (e.g. M.D.s, Oncology Nurses) or as prevention, control and population scientists (e.g., PhDs, DPHs, M.D.s) and are ready to pursue independent careers in cancer research.**
- **At time of application, candidates must be in a "mentored" cancer research postdoctoral position and have completed TWO YEARS OR MORE of research, or be in a suitable independent position for LESS THAN TWO YEARS with continuous previous postdoctoral cancer research training.**
- **Candidate must be able to commit a minimum of 75% of professional effort to the K02 proposal.**
- **Candidate must submit an R01 (or equivalent) research grant application prior to the end of the second year of support.**
- **Recipients of K07, K08, Howard Temin or equivalent awards, former or current principal investigators of Small Grants (R03), exploratory/developmental grants (R21) or equivalent grants are eligible, BUT former or current principal investigators of NIH research project grants, (e.g., R01) or equivalent grants project leaders of subprojects of Program Project Grants (P01) or center grants (P50) and equivalent are NOT ELIGIBLE.**

Period of Support: Up to 3 years, not renewable.

Allowable Costs:

- **Salary: Up to $75,000 plus fringe benefits.**
- **Research Development Support: Up to $50,000.**

NCI Contact: Mary Blehar (mblehar@mail.nih.gov)

Review Criteria-K22

Candidate:

- **(For those in independent positions) Suitability of the position for the candidate to pursue an independent research career.**
- **Quality of the mentored period of cancer research training.**
- **Scientific productivity during the mentored period.**
- **Potential ability to manage an independent research project.**
- **Ability to interact and collaborate with other scientists.**
- **The potential for the candidate to become an independent investigator during this 3-year award.**
- **Strength of letters of reference on behalf of the candidate.**

Research Plan:

- **Scientific and technical merit, appropriateness to facilitate career development objectives.**

Environment/Institutional Commitment:

- **Adequacy of research facilities commitment to scientific development of applicant, and commitment to provide protected time.**

Budget

- **Adequacy of justification in relation to goals and research aims.**

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Transdisciplinary

Mentored Quantitative Research Career Development Award – K25

Important Announcement:

NIH Guide: http://grants1.nih.gov/grants/guide/pa-files/PA-02-127.html

NCI Website: http://cancertraining.nci.nih.gov/research/translational/translational.html

Purpose:

To support the career development of junior investigators with quantitative scientific and engineering background who have made a commitment to focus on cancer biomedical research.

Eligibility:

- **Domestic for profit or non-profit sponsoring institution.**
- **Candidates must be U.S. citizens or non-citizen nationals or have permanent residency status.**
- **Candidates must have an advanced degree in a quantitative area of science or engineering (Ph.D., M.S.E.E., D.Sc., or equivalent).**
- **Candidate's mentor must have strong behavioral or biomedical experience, strong research and training track record and active research support at the time of candidate's application.**
- **Candidates must have a full-time research or academic appointment in the sponsoring institution at the time of award.**
- **Candidate must be able to commit a minimum of 75% of professional effort to the K25 proposal.**
- **Commitment of the sponsoring institution to the candidate research career.**
- **Former principal investigators on small grants (e.g., R03s, R21s) are eligible BUT former principal investigators on NIH research project grants (e.g., R01s), comparable career development awards (e.g., K01, K07, K08, K23), subprojects on Program Project Grants (e.g., P01s) or center grants (e.g., P50s) and equivalent are NOT ELIGIBLE..**

Period of Support: **Up to 5 years, not renewable.**

Allowable Costs: **Up to $75,000 in salary plus fringe benefits and up to $40,000 in research costs.**

NCI Contact: **David Eckstein (**eckstein@mail.nih.gov**)**

Review Criteria-K25

Candidate:

- **Quality of the academic and research record**
- **Potential to become an independent quantitative biomedical or bioengineering researcher or to play a role in multi-disciplinary research teams.**
- **Commitment to a career in quantitative biomedical or bioengineering research**

Career Development Plan:

- **Likelihood that the career development plan will contribute substantially to the candidate's scientific development.**
- **Appropriateness of the proposed didactic and research phases**
- **Consistency of the career development plan with the candidate's career goals and prior research training experience**
- **Quality of the proposed training in responsible conduct of research**

Research Plan:

- **Appropriateness of the research plan to the candidate's stage of research development.**
- **Scientific and technical merit of the research question, design and methodology.**
- **Relevance of the proposed research to the candidate's career objectives.**
- **Where appropriate, adequacy of plans for inclusion of minorities, women and children.**

Mentor:

- **History of research productivity and support in research.**
- **Appropriateness of the mentor's research qualifications in the area of this application.**
- **Quality and extent of the mentor's proposed role in providing guidance and advice to the candidate.**
- **Previous experience in fostering the development of researchers.**

Institutional Environment and Commitment:

- **Evidence of institutional commitment to the candidate's scientific development and that the institution intends for the candidate to be integral to the research program.**
- **Adequacy of research facilities and training opportunities**
- **Quality and appropriateness of environment.**
- **Institutional commitment to an appropriate balance of research and other responsibilities.**

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Cancer Education and Career Development Program - R25T

Important Announcements:

NIH Guide: **http://grants.nih.gov/grants/guide/pa-files/PAR-03-148.html**

NCI Website: **http://cancertraining.nci.nih.gov/research/prevention/pr25t.html**

Purpose:

To support institutional or multi-institutional programs that will train multi- and interdisciplinary pre-doctoral and post-doctoral fellows in highly inter-disciplinary, team-oriented research settings. Conceived for the field of cancer prevention, control, and population sciences, it is used by other highly interdisciplinary fields (e.g., imaging radiology, molecular pathology, molecular epidemiology).

Eligibility:

- **Domestic for profit or not-for-profit institutions.**
- **Principal investigator is the Program leader and must be an established investigator.**
- **Trainees can be pre-doctoral or post-doctoral. NO minimum percent effort requirement.**
- **Trainees are U.S. citizens or permanent residents. However, Foreign Nationals can be trained with NCI permission.**

Special Requirements:

- **Must have a specialized curriculum.**
- **Must use a multi-disciplinary Advisor committee to select and evaluate progress of trainees.**
- **All trainees must have more than one mentor.**
- **Must have ability to accommodate trainees with different scientific backgrounds.**
- **Program objectives cannot be accomplished using a traditional NRSA Institutional Training (T32) Grant.**

Period of Support: **Five years, renewable.**

Allowable Costs: **$500K/yr direct cost.**

- **Salaries of Program Leader/Faculty who design and implement specialized curriculum.**
- **Postdoctoral: $75K salary plus fringes/$30K research. Predoctoral: $20K salary plus fringes/$20K research.**
- **Advertising and recruitment costs.**
- **Flat 8% indirect costs.**

NCI Contact: **Mary Blehar (**mblehar@mail.nih.gov**)**

Review Criteria – R25T

- **Statement of Applicability: Adequacy of the Statement of Applicability justifying the unique use of this specialized R25T mechanism.**

- **Program Justification: Adequacy of the justification provided for program need.**

- **Principal Investigator: Qualifications (and track record for competing renewal applications) of the Principal Investigator to provide both scientific and administrative leadership of the Program.**

- **Advisory Committee: Quality (and track record for competing renewal applications) of the Advisory Committee and appropriateness for performing its critical functions in recruitment of candidates, assignment of mentors, establishment and monitoring of individual training plans, and evaluating and making mid-course corrections for the Program.**

- **Program/Core Requirements: Merit of the Program (and the track record for competing renewal applications) as defined in the didactic and research core requirements to train multi- and interdisciplinary investigators in the proposed field.**

- **Environment: Quality, sufficiency, multidisciplinary nature of the research environment provided by participating institutions.**

- **Mentors: Experience and quality of the mentors to ensure a successful outcome of the Program.**

- **Candidates: Adequacy of plans for (and track record for competing renewal applications) recruiting high quality trainees.**

- **Institutional Commitment: Strength of the institution's commitment to the Program.**

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Cancer Education Grant Program – R25E

Important Announcements:

NIH Guide: **http://grants1.nih.gov/grants/guide/pa-files/PAR-03-093.html**

NCI Website: **http://cancertraining.nci.nih.gov/cancerEd/cancered.html**

Purpose:

To develop and sustain innovative educational approaches that ultimately will contribute to the decrease of cancer incidence, morbidity, and mortality, and to the improvement of the quality of life of cancer survivors.

Eligibility:

- **Domestic for profit or non-profit organizations.**
- **Principal investigator is the program leader and must be an expert in the field of choice.**

Period of Support:

- **The grant is not renewable if used to develop an academic curriculum for new education approaches, which the institution should standardize and assume the responsibility for beyond the 5-year project period. Examples of such programs are education programs in pain management ant palliative care, development of nutrition curriculum in academic institutions, etc. In such cases, the applicant institution is expected to continue the program beyond the 5-year project period.**

- **The grant is renewable for programs designed to stabilize and strengthen activities for the long term (e.g., short-term research experiences to motivate medical, nursing, public health and other health professionals to pursue cancer research careers).**

Allowable Costs: **Up to $300,000.**

NCI Contact: **Mary Blehar (**mblehar@mail.nih.gov**)**

General Review Criteria-R25E

Cancer Education Program:

- **Novelty and significance of the education program to cancer research and/or to the reduction of cancer incidence, morbidity, and mortality and to the improvement of life of cancer survivors.**
- **Quality of the program leader in terms of past track record of achievement and experience to provide direction, coordination and administration of the Program.**
- **Quality of the key personnel.**
- **Overall quality and adequacy of the program design.**
- **Adequacy of plans for recruitment and retention of program participants, including women and participants from underrepresented racial/ethnic groups.**
- **Degree of applicability and portability of the proposed program to others.**
- **Adequacy of the required 'Evaluation Plan.'**
- **Adequacy of the 'Dissemination Plan.'**
- **Adequacy of plans to continue the Program after the period of Federal grant support.**

Additional Review Criteria for Specific Types of R25E Programs:

For programs involving curriculum development:

- **Adequacy of the institutional commitment to continuing the Program after the period of grant support ends.**
- **For competing renewal applications, adequacy of justification for continued support.**

For education programs involving short-term experiences:

- **Adequacy of the faculty commitment to the program.**
- **Adequacy of the research support base and the educational environment.**
- **Adequacy of the candidate pool size.**
- **Appropriateness of candidate recruitment plans including plans for recruitment of minority candidates.**
- **Potential for impacting the participants' choice of a research career in cancer.**
- **Potential for attracting participants back for repeated short-term appointments.**
- **Adequacy of plans for evaluating the impact of the training experience on the research careers of the participants.**

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