TRAINING AND RESEARCH CAREER AWARDS

 Where can I find more information about fellowships and training and career awards?

Go to the <u>NCI Training Career Development and Education</u> page or the Diversity Training Branch (DTB), <u>Center to Reduce Cancer Health Disparities</u> (CRCHD) for information on training and career development initiatives.

To identify the appropriate Program Contact for your area of interest, see the Cancer Training Branch's <u>Program Contact List</u>, the DTB, CRCHD <u>Program Contact List</u>, or contact the <u>program director</u> identified in the Program Announcement.

 How do I identify the correct training award mechanism for my research career?

The <u>Cancer Training Branch</u> and the CRCHD <u>Training</u> web sites list the different NCI supported research training and career development awards according to career stage (i.e., high school, undergraduate, predoctoral, post-doctoral, junior faculty, etc).

The <u>NIH Career Award Wizard</u> may also assist you in identifying the correct career award. In addition, see the <u>NIH K Kiosk</u> for information on career development awards.

 What training opportunities does the NCI support for students and investigators from diverse groups, disadvantaged backgrounds, or with disabilities?

Information on training and career development for individuals from racially and ethnically diverse and medically underserved populations, including eligibility, is available on the CRCHD Training web site.

Administrative supplements to existing grants can be provided to investigators who are seeking to support the training of individuals from <u>underrepresented</u> diverse groups, disadvantaged backgrounds, or with disabilities. For more information, see Research Supplements to Promote Diversity in Health Care Research.

 What post-doctoral training awards does the NCI support for investigators from diverse backgrounds?

The CRCHD Diversity Training Branch supports four distinct types of Career Development Award or K awards: NCI Mentored Career Development Award to Promote Diversity (K01);, The NCI Transition Career Development Award to Promote Diversity (K22); NCI Mentored Clinical Scientist Award to Promote Diversity (K08); and Mentored Patient-Oriented Research Award to Promote Diversity (K23).

The Research Supplements to Promote Diversity in Health Care Research and the Supplements to Promote Reentry into Biomedical and Behavioral Research Careers also support post-doctoral training.

Does the NCI support any pre-doctoral training awards?

Yes. The CRCHD uses the NIH <u>F31</u> grant mechanism to help ensure that diverse pools of highly trained scientists will be available in appropriate research areas to carry out the Nation's biomedical, behavioral, health services, and clinical research agendas.

The NCI Cancer Training Branch supports Ruth L. Kirschstein National Research Service Award Institutional Training Grants (T32) that provide training opportunities for predoctoral as well as postdoctoral individuals in biomedical and behavioral research. Candidates must determine if their institution has a T32 program focused on providing a training experience in the research area of their interest and then apply for a position or slot in the program. Here is a list of the currently active T32 grants. The CRCHD provides supplements to these grants to train individuals from underrepresented diverse groups, disadvantaged backgrounds, or with disabilities.

The NCI Cancer Training Branch supports the <u>Cancer Education and Career Development Program (R25T)</u> for the development and implementation of curriculum-dependent programs to train predoctoral and postdoctoral candidates in cancer research settings that are highly inter-disciplinary and collaborative. CRCHD provides supplements to these grants to train individuals from underrepresented diverse groups, disadvantaged backgrounds, or with disabilities.

What is the Pathway to Independence Award?

The <u>Pathway to Independence (PI) Award</u> assists post-doctoral investigators pursuing a research career in the biomedical sciences in transitioning from a mentored postdoctoral position to a stable independent research position with independent NIH or other independent research support at an earlier stage than is currently the norm.

The NIH Pathway to Independence Award uses the NIH K99 grant mechanism to provide 1 – 2 years of mentored support and uses the NIH R00 grant mechanism to provide 1 – 3 years of independent research support after an independent research position is secured. The NCI restricts eligibility for this award to researchers conducting basic science research in human cancer systems.

What NCI Career Development Awards exist for physician scientists interested in conducting patient oriented or clinical research?

For the purpose of this question, the term "physician scientists" includes clinicians pursuing careers in laboratory-based basic science as well as patient-oriented research. Additionally, the term "clinical research" is research in which the identity of the patients or the identity of the patients from whom cells or tissues under study are obtained is known. Finally, patient-oriented research is research conducted with

human subjects (or on material of human origin) for which an investigator (or colleague) interacts directly with human subjects.

The NIH Mentored Patient-Oriented Research Career Development Award and the NCI Mentored Patient-Oriented Research Career Development Award to Promote Diversity use the K23 grant mechanism to support the career development of clinically trained professionals who have made a commitment to focus on patient oriented research.

The NIH Mentored Clinical Scientist Development Award and NCI Mentored Clinical Scientist Award to Promote Diversity Award use the NIH K08 grant mechanism to support individuals with clinical doctoral degrees who have made a commitment to focus on laboratory-based basic science, biomedical, behavioral, and/ or translational research.

The NCI Mentored Career Development Award to Promote Diversity uses the NIH K01 grant mechanism to support the career development of applicants with a doctoral degree in the fields of cancer biology, etiology, pathogenesis, prevention, diagnosis, and/or treatment. Applicants for this award are limited to individuals from racial and ethnic minority groups; or with disabilities; or from disadvantaged backgrounds.

The NCI Transition Career Development Award and the NCI Transition Career Development Award to Promote Diversity use the NIH K22 grant mechanism to support protected time for newly independent physician scientists who are pursuing basic science or patient oriented research careers to develop their first independent research program.

The NIH <u>Mid-career Award in Patient-Oriented Research</u> uses the NIH K24 grant mechanism to provide mid-career clinical investigators with protected time (1) for patient-oriented research and (2) to act as mentors for junior clinical investigators.

The NCI <u>Paul Calabresi Career Development Award For Clinical Oncology</u> used the K12 grant mechanism to support a research career development experience for medical doctors and basic science researchers in the design, development, and implementation of hypothesis-based therapeutic cancer clinical trials.

 What NCI Career Development Awards exist for investigators interested in conducting cancer prevention, control, behavioral, and population science research?

The NCI <u>Cancer Prevention</u>, <u>Control</u>, <u>Behavioral and Population Sciences Career Development Award (K07)</u> uses the development component of the NIH K07 grant mechanism to support the career development of postdoctoral fellows and junior faculty members who are pursuing careers in cancer prevention, control, behavioral, and the population sciences.

The NCI Mentored Career Development Award to Promote Diversity (K01) supports the career development of individuals from racially and ethnically diverse and

medically underserved populations in the fields of cancer biology, etiology, pathogenesis, prevention, diagnosis, and/or treatment.

The NCI Transition Career Development Award and the NCI Transition Career Development Award to Promote Diversity uses the K22 grant mechanism to support protected time for newly independent investigators (e.g., Ph.D.s, DPHs, MD.s) to develop and receive support for their initial cancer-research programs in cancer prevention, control, behavioral, and the population sciences.

The NIH <u>Established Investigator Award in Cancer Prevention, Control, Behavioral, and Population Science Research</u> uses the NIH K05 grant mechanism to provide protected time to established investigators so that they can devote their time to conduct research and to mentor junior investigators.

Specific funding initiatives are provided under Funding Opportunities on the <u>Division of Cancer Control and Population Sciences</u> and the <u>Division of Cancer Prevention</u> web page.

 What opportunities are available for oncology fellows to pursue in basic science or translational cancer research careers?

The Ruth L. Kirschstein Individual National Research Service Award (NRSA) uses the F32 grant mechanism to support individuals with a doctoral degree (e.g., M.D., Ph.D., D.P.H.) for a three-year period of supervised research in cancer. The Ruth L. Kirschstein National Research Service Award Institutional Training Grant for T32 programs is also available.

The Mentored Clinical Scientist Development Award and Mentored Clinical Scientist Award to Promote Diversity use the NIH K08 grant mechanism to support individuals with a clinical doctoral degree for an intensive, supervised research career development experience in the fields of basic science, biomedical, behavioral, and/or translational research.

The <u>Pathway to Independence Award</u> (K99/R00) assists post-doctoral investigators pursuing a research career in the biomedical sciences in transitioning from a mentored postdoctoral position to a stable independent research position.

The NCI Transition Career Development Award and the NCI Transition Career Development Award to Promote Diversity uses the K22 grant mechanism to support protected time for clinicians, or equivalent, who are pursuing careers in basic science or in patient oriented research.

What type of support is available to transition from postdoctoral positions to independent investigators?

The NCI Transition Career Development Award and the NCI Transition Career Development Award to Promote Diversity use the K22 grant mechanism to support "protected time" for newly independent investigators to develop and receive support for their initial cancer-research programs. This award is intended to facilitate the transition of investigators from the mentored to the independent stage of their

careers. It applies to clinicians (e.g., M.D.s and Doctoral level Oncology Nurses) who are pursuing basic science careers; clinicians who are pursuing careers in patient-oriented research; and individuals (e.g., Ph.D.s, DPHs, MD.s) pursuing careers in the prevention, control and population sciences.

The <u>Pathway to Independence Award</u> (K99/R00) provides up to five years of support, divided into two phases. Phase I provides one to two years of mentored support under a K99 mechanism. Phase II provides up to three years of independent research support under an R00 mechanism.

Does the K08 grant mechanism support human subjects research?

Yes, the K08 grant mechanism can be used to support human subject research. However, clinicians interested in <u>patient-oriented research</u>, should consider the NIH <u>Mentored Patient-Oriented Research Career Development (K23) Award</u> or the NCI <u>Mentored Patient-Oriented Research Career Development (K23) Award to Promote Diversity</u>.

 What NCI Career Development Awards exist for investigators with quantitative scientific and engineering backgrounds?

The NIH <u>Mentored Quantitative Research Career Development Award</u> uses the K25 grant mechanism to support the career development of quantitative scientists who have made a commitment to apply their quantitative skills to biomedical research.

Does NCI provide support for cancer education?

Yes. The NCI Cancer Education and Career Development Program (R25T) supports the development and implementation of curriculum-dependent programs to train predoctoral and postdoctoral candidates. The NCI Cancer Education Grant Program (R25E) provide funding for the development of cancer education programs and cancer research dissemination projects that can be completed within five years.

Are all training mechanisms restricted to U.S. citizens or VISA holders?

Yes, with one exception: the <u>Pathway to Independence Award</u> (K99/R00). Otherwise, you must be a U.S. citizen, a non-citizen national, or a permanent resident with a valid <u>Alien Registration Receipt Card</u> (a "green card") at the time of award.

Can K award recipients apply for and receive R01/ R21/ R03 grant funding?

Yes, K award recipients can apply for and simultaneously hold a K award and an R01, R21, and/ or R03 award; and can additionally have been or be the PI of an R03 or R21 grant at the time of application for a K-award. If they receive an R01 award, they can no longer apply or accept a K-award.

Can K award recipients draw research support from the R01/ R21/ R03 grants?

Yes. K award recipients can draw research support from both their own and others' R01, R03, R21 grants. However, the maximum level of R-grant research support will be determined by the effort commitment requirements of the K-award.

Can K award recipients draw salary support from their own R01/ R21/ R03 grants?

Yes, but only during the last 2 years of their K award and if they are the PI of the R01/R21/R03 grant at the time of review. See the <u>April 10, 2008, Guide announcement</u>.

 What NCI Career Development Awards exist for experienced scientists who wish to make major changes in the direction of their research careers?

The NIH <u>NRSA For Senior Fellows</u> uses the F33 grant mechanism to support experienced scientists who wish to make major changes in the direction of their research careers or who wish to broaden their scientific background by acquiring new research capabilities as independent investigators in cancer research.

Does NCI have Loan Repayment Programs for investigators?

Yes. NCI participates in the <u>NIH Loan Repayment Programs</u>. In exchange for a two year research commitment, NIH will repay up to \$35,000 per year of your qualified education debt and the taxes incurred on that income. Research areas include clinical research, pediatric research, and health disparities research.

Does NCI have a training office I can call for advice?

Yes. The <u>Cancer Training Branch</u> and the Diversity Training Branch provides information regarding both <u>training</u> and career development. To identify the appropriate program contact for your area of interest, see the Cancer Training Branch's <u>Program Contact List</u>, the Diversity Training Branch's <u>Program Contact List</u>, or contact the program director identified in the Program Announcement.