# NCI Guidelines for Administrative Supplements for Emerging Technologies Continuing Umbrella of Research Experiences (ET CURE)

**Supplement Title:** Administrative Supplements for ET CURE: Reducing Cancer Health Disparities (CHD) by creating increased contiguous training and educational opportunities in emerging technologies for individuals from underserved populations.

**Application Deadline:** July 1, 2009

The Center to Reduce Cancer Health Disparities (CRCHD) of the National Cancer Institute (NCI) announces for fiscal year 2009, the opportunity to seek administrative supplemental funding to plan and implement a research training program with enhanced educational opportunities in emerging technologies (ET-CURE) for high school and undergraduate students from underserved populations.

**Eligibility Requirements:**

CRCHD General Guidance for ARRA Funded Administrative Supplements

- Eligible PIs may apply for this administrative supplement opportunity even if they have applied for other ARRA administrative supplements. Applicants may request administrative supplements for up to two years of funding. Preference will be given to requests of approximately $100,000 in direct costs.
- Unobligated balances in the current grant, progress on previous CRCHD grants/supplements, and the number of other ARRA awards will be considered in NCI/CRCHD's evaluation of the supplement request.
- Funding priority will be given to those applications addressing ARRA goals of hiring and preserving jobs and accelerating the tempo of scientific research on active grants. All applications must clearly specify the purpose/projects for which funds are to be used.

**Eligible Institutions:**

Foreign institutions are not eligible to apply. The applicant institution must have a strong and high quality research program in the area(s) proposed for research training and must have the requisite staff and facilities on site to conduct the proposed research training program. Any National Cancer Institute (NCI)- designated Cancer Center funded through the Cancer Center Support Grant (CCSG) (P30) is eligible to apply for this supplement. These supplements must be used for the sole purpose of providing research training experiences in emerging technology disciplines for high school and undergraduate students from underserved populations. Current NCI awardees of the P30 Cancer Center Support Grant (CCSG) are eligible to apply for this supplement provided that the following conditions are met:

1. The original Cancer Center Support Grant (P30) shows evidence of a strong commitment to training and education;

2. Costs for the proposed research training program cannot have been in the original award;

3. The original award must have a minimum of two years remaining on the grant to be eligible for funding under this supplement;

**Eligible Individuals:**

Any individual with the skills, knowledge, and resources necessary to carry out the proposed research training program is invited to work with their institution to develop an application for support. This training opportunity is for individuals from underserved backgrounds. For CRCHD Diversity Training Branch (DTB) purposes, a person is underserved if he or she belongs to a particular ethnic and racial group that has been determined by the grantee institution to be underrepresented in cancer-related biomedical, behavioral, clinical, or social science research. Underserved individuals are not limited to racial and ethnic minorities but can also include individuals, as selected by the institution, as underrepresented as cancer research, e.g. first generation college graduates, the economically disadvantaged, those with a disability etc. A detailed description is listed below:

A. Individuals from racial and ethnic groups that have been shown by the National Science Foundation to be underrepresented in health-related sciences on a national basis In addition, it is recognized that under-representation can vary from setting to setting and individuals from racial or ethnic groups that can be convincingly demonstrated to be underrepresented by the grantee institution should be encouraged to participate in this program.

B. Individuals with disabilities, who are defined as those with a physical or mental impairment that substantially limits one or more major life activities.

C. Individuals from disadvantaged backgrounds who are defined as:
1. Individuals who come from a family with an annual income below established low-income thresholds. These thresholds are based on family size, published by the U.S. Bureau of the Census; adjusted annually for changes in the Consumer Price Index; and adjusted by the Secretary for use in all health professions programs. The Secretary periodically publishes these income levels. For individuals from low income backgrounds, the institution must be able to demonstrate that such candidates have qualified for Federal disadvantaged assistance or they have received any of the following student loans: Health Professional Student Loans (HPSL), Loans for Disadvantaged Student Program, or they have received scholarships from the U.S. Department of Health and Human Services under the Scholarship for Individuals with Exceptional Financial Need.

2. Individuals who come from a social, cultural, or educational environment such as that found in certain rural or inner-city environments that have demonstrably and recently directly inhibited the individual from obtaining the knowledge, skills, and abilities necessary to develop and participate in a research career. Recruitment and retention plans related to a disadvantaged background are most applicable to high school and perhaps undergraduate candidates

Prospective candidates for the training program must be citizens or non-citizen nationals of the United States, or must have been lawfully admitted to the United States for permanent residence (i.e., in possession of a currently valid Alien Registration Card I-551, or other legal verification of such status). Non-citizen nationals are generally persons born in outlying possessions of the

United States (i.e., American Samoa and Swains Island). Individuals on temporary or student visas are not eligible.

Eligible high school students must be in good standing at their high schools and demonstrate a high aptitude and interest in science. Undergraduate students must demonstrate a high aptitude and interest in science. Applications must be responsive to the criteria described in the supplement guidelines.

**Purpose:**

The purpose of this administrative supplement is to fund the planning, implementation and assessment of an ET CURE research training program, or to augment the training activities of an existing ET CURE pilot.

**Background/ Research ET CURE Training Objectives:**

The field of emerging and advanced technologies has been identified as an increasingly important area for training. It is essential that investigators from underserved groups and individuals from disadvantaged populations become involved in emerging technology development because of its potential to advance the field of cancer research, and by extension, support the NCI strategic objective to overcome cancer health disparities. The overarching goals of the Emerging Technologies Continuing Umbrella of Research Experiences (ET CURE) initiative are to:

- Create a pipeline of underserved students and investigators in the fields of emerging and advanced technologies;
- Increase the number of scientists from underserved populations with training in the elective disciplines of focus, such as nanotechnology, clinical proteomics, bioinformatics, biophotonics and cancer health disparities across the cancer research continuum; and
- Enhance application of emerging technologies to cancer research through increased training and educational opportunities.

Further, the CRCHD comprehensive ET CURE research training program will begin with high school or undergraduate students and foster scientific, academic and research excellence throughout the trainee's educational progression and culminate with the emergence of a mature investigator, capable of securing advanced research project funding for basic, clinical, or community-based participatory research. The objective of this holistic program is to prepare trainees from underserved populations for careers in this field and support them throughout their career progression. Ultimately, those that emerge from this program will be competitive, culturally competent, and capable of reducing health disparities across the cancer research continuum.

**Administrative Supplement Objectives:**

The purpose of the administrative supplement is to fund the planning, implementation and assessment of an ET CURE research training program by addressing the following three phases:

**PHASE 1: PLANNING**

The establishment of a coordinated Training Committee to support the proposed ET CURE research training program.

**PHASE 2: RESEARCH TRAINING PLAN DEVELOPMENT**

The development of an ET CURE research training plan which will be subsequently implemented as a program to train a selected pool of students.

**PHASE 3: ASSESSMENT**

Provision of an in depth assessment of the ET CURE research training program after its conclusion; highlighting challenges, strengths and lessons learned in the final report. The Training Committee and mentors are encouraged to utilize methods for ongoing evaluation regarding the quality of the training program and develop plans to obtain feedback from trainees about the research training experience.

Phase one is largely constituted by the formation of the Training Committee and their activities. Phase two is deeply rooted in the development of an ET CURE research training plan, which will be subsequently implemented as a program. Phase three activities takes place after the research training program is completed and entails an assessment of the program. The Training Committee is expected to be the coordinating body throughout all three phases.

**PHASE 1: PLANNING**

A period of time should be devoted to the conceptualization, coordination, and identification of the personnel, laboratories and elective discipline research that will be included in the ET CURE research training plan and program. The planning period or phase one is the time where the anticipated tenets of the program will be established. Thus, the first item to be carried out is the formation of a Training Committee and the identification of an ET CURE coordinator that will facilitate and organize the activities of the training committee. The coordinator will receive guidance and instruction directly from the training committee.

**A) Training Committee**

1. **Training Committee Formation**

Personnel from the applicant institution must be identified to serve on the Training Committee. The Training Committee is expected to facilitate and provide guidance about the planning and implementation of the proposed ET CURE research training program. As a result, the Training Committee members must possess the scientific background, leadership and administrative capabilities required to coordinate, supervise, and direct the proposed research training program. The members of the Training Committee should have a successful past training record, an established basic, clinical or community-based participatory research history, and available resources and infrastructure to conduct the proposed research training program at the institution. A biosketch and letter of commitment from each member of the Training Committee must be provided. The selection criteria utilized to identify the Training Committee members and the requisites for inclusion should be discussed in the application.

### 2. Training Committee Activities

The Training Committee will be responsible for the overall direction, management and administration of the research training program, program evaluation, submission of all required forms in a timely manner and the provision of guidance to identify appropriate personnel for training, mentoring and career development. In concert with the ET CURE coordinator, the Training Committee is expected to conduct an assessment of the current emerging technology programs, training activities/opportunities and infrastructure. As a result, new training programs and mechanisms may be created to provide trainees with opportunities to fulfill their research requirements in laboratories using state-of-the- art equipment and to aid their career development and mentoring by cancer research investigators.

The Training Committee will select laboratories, mentors and the elective disciplines of focus to be involved in the ET CURE research training program. In addition, the Training Committee is expected to be actively engaged in evaluating and establishing the criteria used to select trainees for the research training program, as this body will ultimately be responsible for the selection and appointment of eligible trainees to the ET CURE research training program. Thought must be given to the ability to recruit students to the program, the screening process and the ability to engage students in active research pursuits at the research training program's conclusion. The Training Committee will consolidate what is already known about recruitment, engagement, and retention of underserved students at the high school/undergraduate level of the research training site based on any available literature and educator experiences. The infrastructure and management support to provide the foundation for the program should be evaluated in this context. Lastly, the training committee will govern the development of the curricular materials required and identify the laboratory training experiences that each trainee will engage in during the research training program and provide a corresponding timeline for all program events.

## B) Selection of Laboratories, Mentors and Elective Disciplines

The Training Committee will select laboratories, mentors and the elective disciplines of focus to be involved in the ET CURE research training program. The research training program should be equipped to conduct research and provide training in specific elective development areas. CRCHD has identified the fields of nanotechnology, clinical proteomics, biophotonics, and bioinformatics as initial disciplines of focus. In this way, intended communications and programmatic activities from each research training program host institution will assist and strengthen on-going and future partnerships. Thus, the identification of mentors with appropriate expertise and their corresponding laboratories will be integral to the structure and foundation of the research training program. These established investigators should be experienced in mentoring and committed to student training and development. Consideration should also be given to the demographics of the investigators selected to be mentors. The ET CURE research training program activities are intended to foster new collaborations that promote scientific interactions and take maximum advantage of the institution's research and training capacities. Lastly, the mentors involved in the research training program should be equipped to conduct research and provide training in designated elective disciplines.

## C) Plan for Trainee Recruitment and Selection

The Training Committee is expected to be actively engaged in evaluating and establishing the criteria used to select trainees for the research training program. The CRCHD expects efforts to

diversify the workforce to lead to the recruitment of the most talented students from all groups; to improve the quality of the educational and training environment; to balance and broaden the perspective in setting research priorities; to improve the ability to recruit subjects from underserved and diverse populations into training programs; and to improve the Nation's capacity to address and eliminate cancer health disparities. The criteria that will be utilized for student pool selection should be delineated and will likely include a range of qualities that include, but are not limited to, academic achievement or standardized test scores, socioeconomic and ethnic representation, drive and ambition, and a commitment to a career in cancer research and cancer health disparities. The selected trainees of choice must present a convincing case that he/she will have a high probability of developing the research skills and abilities needed to work in a collaborative environment toward becoming a successful investigator. The Training Committee is expected to be actively engaged in evaluating and establishing these criteria.

**D) Plan for Developing Curricular Education and Laboratory Training**

The Training Committee will govern the development of the curricular materials required and identify the laboratory training experiences that each trainee will engage in during the research training program. The research training program should plan to provide didactic training as well as laboratory training. A plan for curriculum development or educational literature may need to be developed. This should include a plan for determining trainee experience and needs and monitoring progress to accomplish the desired ET CURE training program goals. The research training program should develop trainee skills in understanding research, applying critical thinking in research, identifying problems that interfere with the process of conducting research and trainees should have the capability to raise questions and propose solutions to resolving problems. In addition, trainees should be prepared to utilize their research findings as they pursue future research. Thus, the activities and experiences in both the classroom and laboratory will play large roles in the program.

**E) Timeline Generation**

A timeline needs to be generated that clearly establishes when mentors, laboratories and elective disciples will be selected. The anticipated timeline for trainee recruitment and selection needs to be stated along with the time that will be devoted to the screening of potential candidates. Lastly, the metrics that will be utilized for both didactic and laboratory achievement need to be described. In addition, the time designated for laboratory training and the time devoted to didactic instruction needs to be listed. The structure of the program also merits time allocation; for example, how many weeks will the students receive laboratory training and how much time will be spent in the lab on a daily basis?

**PHASE 2: RESEARCH TRAINING PLAN DEVELOPMENT AND**

**IMPLEMENTATION ET CURE Research Training Plan Elements**

Once the Training Committee has completed the preliminary planning in phase one, the next step is to develop a research training plan. The ET CURE research training plan should include a detailed description of the research, training, and mentoring experiences that will occur during the proposed period of support. The research training plan must address the following elements:

A) Which laboratories and facilities will be utilized
B) The faculty and mentors involved
C) Proposed didactic coursework and laboratory skills to be mastered
D) The training environment to ensure that it is culturally and socially inviting
E) Additional ET CURE activities such as seminars, journal clubs and travel to scientific meetings

**A) Identification of Laboratories and Facilities**

The portion of the administrative supplement application that pertains to laboratories and facilities should illuminate what laboratory training and research techniques will be taught. Additionally, the facilities where the laboratory training will be taking place should be described in detail. After mentors have been identified by the Training Committee in the planning phase, a process for pairing trainees and mentors and subsequent placement in laboratories should be described in the application. In addition, the proposed plan for ascertaining the trainee's past laboratory training experiences, current training needs, and a vehicle for monitoring progress to accomplish desired goals in the laboratory should be described.

ET CURE trainees should be provided with a forum to discuss and present their research findings such as lab meetings, this forum/facility should also be described. For example, a conference room or a library in close proximity to the laboratory may be designated as a meeting place for such exchanges. The techniques and operational skills that the trainee will master through the laboratory experiences should be stated along with a listing of what instrumentation will be involved in the research training plan. Plans to include core facilities and fundamental laboratory techniques should also be included in the application. The ET CURE research training program has several strengths, one of which is that the research capabilities of the NCI-supported Cancer Center and the investigators performing research there are superb. The incorporation of student excellence in combination with an enriched training environment and committed mentors is anticipated to yield an optimal opportunity for research, training and career development. The planned laboratory experiences that the trainees will engage in during the course of training should be described in detail.

**B) Mentor Identification**

The portion of the administrative supplement application that pertains to mentor selection should illuminate the criteria that the Training Committee utilized in mentor selection, which mentor characteristics were deemed essential and how the mentor's selection/participation will enhance the ET CURE research training program. Discussion regarding the number of mentors chosen and the amount of time that each mentor can allocate to the research training program is critical to the overall program, thus a detailed accounting is desired. Committed mentors with a successful research training record are highly prized. Meetings should be convened between the Training Committee and chosen mentors to establish appropriate research projects, determine the number of students that can be trained, determine how many mentors will be needed and attempt to pre-empt any cultural, socioeconomic, and/or ethnic experiences that may impede the candidate's progress during his/her development toward becoming an independent research scientist engaged in cancer research or cancer health disparities while in the program. The

methods utilized to establish appropriate research projects needs to be presented in the application. Additionally, a listing of the number of anticipated meetings between mentors and the Training Committee needs to be stated, along with the areas of concentration/focus such as career development etc.

**C) Didactic Coursework and Laboratory Training**

The portion of the administrative supplement application that pertains to the trainees didactic coursework instruction and laboratory training opportunities should be described in detail. Students are expected to devote a minimum of three months during any one year, which may include a full-time summer experience and/or part-time experience during the school year, in the laboratories and designated training facilities. Please describe the anticipated time allocations for the trainees in the ET CURE research training program, including any time devoted to research during the calendar school year if applicable. All trainees are required to pursue their research training full time, normally defined as 40 hours per week, or as specified by the sponsoring institution in accordance with its own policies. The time devoted to allow the trainees of the ET CURE research training program to network and share experiences should also be denoted. A complete description of this schedule is required.

The proposed research training program should make adequate provisions for both didactic training and laboratory training. The amount of time allocated to hands on laboratory experience and time spent in the classroom should be clearly delineated in the application. Additionally, didactic training may require curriculum development if the available courses or materials are not available. A discussion regarding the personnel involved and the method for curriculum development also needs to be articulated in the application. At minimum, it is expected that a basic course in the elective emerging technology discipline be delivered to the student, prior to laboratory entry. Please describe the process for this delivery and what classroom instruction will be involved. A complete description of the didactic activities and the corresponding schedule is required. After the trainee and mentor are paired, mentors can assess the candidate's strengths and weaknesses and augment the educational experience with remedial tutoring if required. However, the goal of the ET CURE research training program is to identify candidates with excellent academic performance, so remedial coursework is not anticipated.

The planned laboratory and research experiences that the trainees will engage in should be described in detail. The time devoted to laboratory training should develop the trainee's skills in understanding research, expand their critical thinking ability, facilitate the ability to conduct independent research, overcome research obstacles and raise questions and propose solutions to resolving problems. The provision of information regarding what the specific research training program milestones and how they were ascertained should be established for experiences in both the classroom and the laboratory. Additionally, the evaluation of these milestones should include both quantitative as well as qualitative data; for example, exam scores or proficiency in articulating scientific data results. A timeline for the achievement of programmatic milestones, and an integrated mentoring plan that fosters frequent communication between the student, mentor and the Training Committee should be in place. The proposed plan or activity that would allow trainees and mentors to meet weekly to discuss current laboratory activities, project progression and to provide an opportunity for the mentor to provide counsel needs to be

described. Additionally, the proposal needs to illuminate how the students will gain information about careers in cancer health disparities research and be prepared for next-steps in the trainee's development. A listing of the number of anticipated meetings that will occur between the trainee and the mentor needs to be stated.

**D) Training Environment**

The portion of the administrative supplement application that pertains to the training environment should illuminate any consideration given to the quality and appropriateness of the training environment. If special or unique factors that pertain to cultural competence and educational delivery were taken into account, they should be described in this portion of the application. Any measures taken by the applicant institution to ensure that the training environment for the proposed ET CURE research training program is engaging, inviting and culturally appropriate should also be included.

**E) Other ET CURE Activities**

During the research training period, scientific seminars should be attended, journal club meetings be instituted and venues identified for furthering the student's education in science, medicine and emerging technologies. Please describe the proposed schedule of journal club, seminar and scientific meeting attendance that will occur during the research training program. Trainees should have the opportunity to prepare hypotheses driven publications and reports to facilitate scientific literature proficiency, so a description of the activity that would allow that should also be described. A listing of the number of anticipated meetings (*i.e.* seminars, scientific talks, journal clubs) that are scheduled needs to be stated, along with consideration regarding what scientific conference(s) the trainees will attend.

After the research training plan has been developed, submitted and approved by LeeAnn Bailey, ET CURE program director; then the plan can be implemented in the form of a research training program to train a selected pool of students.

**PHASE 3: ASSESSMENT**

Within 90 days after the conclusion of the funded activity, the PI must submit a final assessment report to the ET CURE program director, LeeAnn Bailey. The final assessment report should include a description of the activities and outcomes of the research training plan program and an assessment of the success of the applicant institution in meeting the proposed goals, including the identification of problems if encountered. The assessment should highlight challenges, illuminate strengths and impart lessons learned. The Training Committee and mentors are encouraged to utilize methods for ongoing evaluation of the quality of the research training program during the implementation of the program to provide metrics at the research training program's conclusion. The metrics that the applicant institution plans to address and a description of the methodology that is planned to be utilized for collecting both quantitative and qualitative data should be discussed in the application. Plans to obtain feedback from the trainees in the ET CURE program should be also be described along with approaches for student tracking during and after exit from the research training program.

**Research Training Program Outcomes:**

**1) PLANNING**
**Planning Phase Outcomes:**

- A Detailed description of the ET CURE research training program and its elective discipline area(s);
- The Role(s)/Responsibilities of staff involved;
- Target curriculum to be generated
- Proposed timeline of events during support
- Student pool recruitment, selection criteria, and plans for retention

**2) RESEARCH TRAINING PLAN DEVELOPMENT**
**Research Training Plan Outcomes:**

- Detailed ET CURE research training plan description
- Plan for the execution of research training program to train pool of students and plans for the subsequent evaluation of research training program;
- Identification of the resources necessary for systemic and contiguous support.
- Execution of ET CURE research training plan to train a pool of students

**3) ASSESSMENT**
**Assessment Outcomes**

- Mechanisms to enable student trainee's ability to successfully complete ET CURE research training opportunity and to identify the next research training opportunity to ensure retention in the ET CURE pipeline and future success.
- Final assessment report that includes a description of the activities and outcomes and an assessment of the success obtained.

**Allowable Costs:**

Allowable costs are listed below and inclusion/applicability will vary depending upon the needs, design and structure of the proposed ET CURE research training program. The applicant institution should include information that documents a commitment to the proposed research training program's goals, and provide assurance that the institution intends the program to be an integral part of its research and research training endeavors. Included in the application should be a description of any institutional financial support devoted to this research training opportunity. Additional financial support or matching institutional funds are encouraged.

A. **Salaries**:

Salaries are provided as a subsistence allowance for trainees to help defray living expenses during the research training experience and are based on a 12-month appointment period. The salary is not provided as a condition of employment with either the Federal Government or the grantee institution nor is it to be considered a payment for services performed. Salaries will be

based on the annual NIH salary levels at the time of award. Salaries may be adjusted only at the time of appointment or reappointment and may not be changed in the middle of an appointment period. For appointments of less than a full year, the salary will be based on a monthly or daily pro-ration of the annual amount. No departure from the established salary schedule may be negotiated by the institution with the trainee. See NOT-OD-06-026.for specific information.

**B. Tuition, Fees, and Health Insurance**

The NIH will offset the combined costs of tuition, fees and health insurance (either self-only or family as appropriate) at the rate in place at the time of the award. The NIH is currently considering a revised policy for offsetting the costs of tuition and health insurance, and will publish a notice highlighting any modifications in the near future. The rate currently provides 100% of all costs up to $3,000 and 60% of costs in excess of $3,000 per trainee. Costs associated with this category are allowable only if they are required for specific courses as part of the approved research training program and are applied consistently to all persons in a similar research training status at the institution regardless of the source of support.

**C. Trainee Travel**

Trainee travel to attend at least one scientific meeting or workshop that the institution determines to be necessary for the individual's research training experience is an allowable trainee expense. Funds may not be expended to cover the costs of travel between the trainee's place of residence and the training institution, except that the grantee organization may authorize a one-way travel allowance in an individual case of extreme hardship. Amounts for trainee travel are not uniform throughout the NIH.

Additionally, support for travel to a research training experience away from the institution may be permitted. Research training experiences away from the parent organization must be justified considering the type of opportunities available for training, and how the opportunities differ from and complement those offered at the parent institution, and the relationship of the proposed training experience to the trainee's career stage and goals. This type of travel and research training requires prior approval from the NIH awarding component, and, if not known at the time of application, may be submitted at any time during the award period.

**D. Trainee Related Expenses (TRE)**

The applicant institution may request the NIH standard NRSA Training Related Expenses $2,200 annually for each trainee to help defray other research training expenses, such as staff salaries, consultant costs, equipment, research supplies, and faculty/staff travel directly related to the research training program. See NOT-OD-06-026 for additional information. Funds are provided as a lump sum on the basis of the predetermined amount per predoctoral trainee approved for support.

Under exceptional circumstances, which can include accommodating the disabilities of a trainee, it is possible to request training related expenses above the standard level. Requests for

additional costs must be explained in detail and justified in the application. Consultation with LeeAnn Bailey, ET CURE program director in advance of such requests is strongly advised.

**Funding Restrictions:**

All NIH awards are subject to the terms and conditions, cost principles, and other considerations described in the NIH Grants Policy Statement. The Grants Policy Statement can be found at http://grants.nih.gov/grants/policy/policy.htm.

Pre-Award Costs are not allowable charges for either salaries or tuition on institutional training grants since stipends and tuition costs may not be charged to the grant before the trainee appointment is actually made. However, the policies governing the pre-award cost authority for the expenditure of the other funds provided in a training grant are those permitted in the NIH Grants Policy Statement as follows:

A grantee may, at its own risk and without NIH prior approval, incur obligations and expenditures to cover costs up to 90 days before the beginning date of the initial budget period of a new or competing continuation award if such costs: are necessary to conduct the project, and would be allowable under the grant, if awarded, without NIH prior approval. If specific expenditures would otherwise require prior approval, the grantee must obtain NIH approval before incurring the cost. NIH prior approval is required for any costs to be incurred more than 90 days before the beginning date of the initial budget period of a new or competing continuation award.

The incurrence of pre-award costs in anticipation of a competing or non-competing award imposes no obligation on NIH either to make the award or to increase the amount of the approved budget if an award is made for less than the amount anticipated and is inadequate to cover the pre-award costs incurred. NIH expects the grantee to be fully aware that pre-award costs result in borrowing against future support and that such borrowing must not impair the grantee's ability to accomplish the project objectives in the approved time frame or in any way adversely affect the conduct of the project. See NIH Grants Policy Statement http://grants.nih.gov/grants/policy/nihgps_2003/NIHGPS_Part6.htm.

**Application Procedures:**

Applicants are encouraged to discuss their administrative supplement request with the NCI ET CURE Program Director (LeeAnn Bailey) prior to submission.

Use the PHS 398 research grant application instructions and forms (rev. 11/07). Follow standard PHS 398 instructions for font size. NIH will return applications that are not submitted on the 9/04 version. For further assistance contact GrantsInfo at 301/435-0714 or via email at GrantsInfo@nih.gov.

All requests must include the following:

1. **Cover letter**: A cover letter should accompany each application and be addressed to Dr. LeeAnn Bailey, ET CURE program director. Include the following statement: "Per supplement instructions, a detailed budget request is enclosed." The cover letter should also include the Cancer Center Support Grant number and the full name and contact information for the project leader of the application. It must be signed by the applicant's Cancer Center Director and the appropriate business official of the institution. In addition, each application must include written "Letters-of-Commitment" from the applicant institution along with "Letters-of-Commitment" from any partnering institution.

2. **PHS 398 Face page** (PHS 398, Form Page 1):
    a. Item 1: The request must have the same title as the original award. Please include the number of the original grant.
    b. Item 2: Identify as Administrative Supplement for ET CURE
    c. Item 3: The request must have the same PI as the original grant.
    d. Item 4: Applicant may request up to 24 months of support. There must be an active original award during the entire funding period. Denote the direct and total costs for the first year, as well as for the entire period of support. Direct costs should not exceed those stated under Allowable Costs above.

3. **PHS Biographical Sketch Format Page**: (Training Committee Members and Mentors). This sketch should also describe the past research training record of each individual and designated preceptors, mentors and investigators. Examples of successes in training former students should be included from all designated personnel, as well as examples of career development and the pursuit of productive scientific careers by former trainees should be detailed. Examples of evidence can include successful completion of programs, further career advancement of former trainees such as receipt of fellowships, career awards, further training appointments and similar accomplishments. Evidence of a productive scientific career can include a record of successful competition for research grants, receipt of special honors or awards, a record of publications, receipt of patents, promotion to scientific positions, and any other accepted measures of success consistent with the nature and duration of the training period.

4. **PHS Other Support Format Page**: Documentation of active research funding (i.e., NIH, other federal, private sources) for all collaborating investigators.

5. **Detailed Budget for Initial Budget Period** (**PHS 398** Form pages 4-6)
   All applicants must provide an itemized budget that must be signed by the grantee institution's business office.

6. **Research Training Plan**
   The ET CURE research training plan must include the following: title, elective core discipline being addressed, brief description of the research training program, rationale/justification, impact, budget, timeframe, programmatic targets/milestones and partners. The application must adequately address:
    a. Which laboratories and facilities will be utilized
    b. The faculty and mentors involved
    c. Didactic coursework and Laboratory skills to be mastered
    d. The training environment to ensure that it is culturally and socially inviting.
    e. Additional ET CURE activities such as seminars, journal clubs and travel to

scientific meetings

The research training plan must be presented in adequate detail and address the Research Training Program Outcomes as described in this document.

7. **Literature Cited**
    a. Provide a listing of relevant publications.

8. **Relevant letters of Support**

**Submission of the Administrative Supplement Request**

Requests for these administrative supplements must be submitted to CRCHD (see address below) as described in these program guidelines. Formal requests must be received on or before July 15, 2008. Late applications will not be accepted. Note that the NIH Center for Scientific Review (CSR) IS NOT involved in receipt and processing of these requests. **Applicants are strongly encouraged to submit their administrative supplement requests electronically as an e-mail attachment in PDF format; however, the scanned application must include the signature of the AOR.**

**Electronic Submission**:

If sending an electronic PDF copy, the email address is **baileyl@mail.nih.gov. DO NOT** submit application via Grants.gov as the NIH Center for Scientific Review (CSR) **IS NOT** involved in receipt and processing of these requests.

**Paper Submission**:

Submit a signed, typewritten original of the request and **five** signed, single-sided photocopies, in one package to:

Dr. LeeAnn Bailey Ph.D.
ET CURE Program Director
National Cancer Institute
Center to Reduce Cancer Health Disparities
6116 Executive Blvd., Suite 602, Rm 6032
Rockville,MD. 20852
Phone: 301-496-7344
Fax: 301- 435-9225

**Review Considerations:**

All proposals will undergo review for scientific merit by a committee of NCI staff with expertise in the disciplines pertaining to the ET CURE concept. Those proposed projects judged to be responsive to the intent of this initiative will be evaluated based on the review criteria below, and prioritized accordingly.

1. **Training Committee**

Does the Training Committee have the appropriate scientific background, expertise, and experience to direct, manage, coordinate, and administer the proposed research training program? Has an appropriate time commitment been established to ensure that sufficient time is available to allocate to the ET CURE research training program?

2. **Mentors**

What is the caliber of personnel identified to participate in the ET CURE research training program? What is the track record of each mentor with regard to training and research? Have the mentors been successful in competing for research support in areas directly related to the proposed research training program? Is the designated position appropriate for the mentor's role in the research training program? Are a sufficient number of experienced mentors with the appropriate expertise and funding available at the applicant institution to support the number of trainees and level of trainees proposed in the application? Specific attention will be given to the number of personnel represented from the Cancer Center.

3. **Trainee Selection**

Are the trainee selection criteria and recruitment methods described adequate to ensure that appropriate candidates are identified for this opportunity? What assessment will be utilized to determine the applicant's potential for independent contribution to scientific knowledge? What is the appropriateness of the applicant pool? What is the proposed plan for the selection and retention of individuals appointed to the training program? What is the size and quality of the applicant pool? Are the recruiting procedures, trainee selection criteria, and retention strategies appropriate and well defined? What advertisement plans or other effective strategies to recruit high-quality trainees are envisioned?

4. **Training Environment**

What is the quality of the training environment? What is the institutional commitment to: research training of undergraduate fellows and high school trainees, the quality and availability of facilities and related resources (e.g. equipment, laboratory space, computer time, subject populations), and the availability of research support? Does the training environment contain special and unique factors that pertain to cultural competence and education? Is the quality of the research environment for the proposed research training program appropriate? Lastly, is the proposed research training program a high priority for the applicant institution's overall research program/mission?

5. **Research Training Plan**

The merit and quality of the highlighted area of research focus and research training plan will be evaluated regarding the following:

a. Which laboratories and facilities will be utilized;
b. The faculty and mentors involved;
c. Didactic coursework and Laboratory skills to be mastered;
d. The training environment to ensure that it is culturally and socially inviting.

Additionally, the application will be evaluated regarding the following:

-Does the potential of the proposed research training plan, serve as a sound foundation that will lead the candidate to a productive research career in scientific

areas related to the mission of CRCHD?
-Is the quality of the scientific content in the research training plan original and feasible for the proposed research training and mentoring plan?

6. **Training Potential**

Does the proposed training experience contribute to the applicant's needs in preparation for a research doctoral degree? Does the research training plan provide the fellow with the individualized and supervised experiences that will develop his/her research skills in emerging technologies and augment the ability to think critically about scientific complexities? Is the quality of proposed course contents and training experiences appropriate for the trainees to be included in the program? The majority of scientific investigations that pertain to cancer and disease are multidisciplinary and incorporate several disciplines. Does the ET CURE research training program provide an excellent opportunity for students to gain education about and exposure to these fields? Does, the research training proposal incorporate inter- and multi-disciplinary and inter-professional research training opportunities and/or novel concepts, approaches, methodologies, or technologies?

7. **Institutional Commitment**:

Does the applicant institution have a commitment to the ET CURE research training program and to training the next generation of cancer researchers? If so, does the applicant institution include information that documents a commitment to the proposed research training program's goals? Is assurance provided that the institution intends the program to be an integral part of its research and research training endeavors? Does the application include a description of support (financial or otherwise) to be provided to the program? Which could include; for example: space, shared laboratory facilities and equipment, funds for curriculum development, release time for the Training Committee and participating faculty, support for additional trainees in the program, matching funds, or any other creative ways to improve and enhance the growth of the research training program.

**Additional Review Criteria:**

In addition to the above criteria, where appropriate, the following items will continue to be considered in the determination of scientific merit and the priority score:

**Protection of Human Subjects from Research Risk:** The involvement of human subjects and protections from research risk relating to their participation in the proposed research will be assessed (see the Research Plan, Section E on Human Subjects in the PHS Form 398).

**Inclusion of Women, Minorities and Children in Research:** The adequacy of plans to include subjects from both genders, all racial and ethnic groups (and subgroups), and children as appropriate for the scientific goals of the research will be assessed. Plans for the recruitment and retention of

subjects will also be evaluated (see the Research Plan, Section E on Human Subjects in the PHS Form 398).

**Care and Use of Vertebrate Animals in Research:** If vertebrate animals are to be used in the project, the five items described under Section F of the PHS Form 398 research grant application instructions will be assessed.

**Biohazards:** If materials or procedures are proposed that are potentially hazardous to research personnel and/or the environment, determine if the proposed protection is adequate. Award Criteria

**Authority and Regulations**

The PHS strongly encourages all grant recipients to provide a smoke-free workplace and discourages the use of all tobacco products. In addition, Public Law 103-227, the Pro- Children Act of 1994, prohibits smoking in certain facilities (or in some cases, any portion of a facility) in which regular or routine education, library, day care, health care, or early childhood development services are provided to children. This is consistent with the PHS mission to protect and advance the physical and mental health of the American people.

**Inquiries**

Direct inquiries concerning the supplement application and programmatic matters to:

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