

# AMERICAN CANCER SOCIETY CANCER HEALTH EQUITY RESEARCH CENTER

### **INSTRUCTIONS FOR SUBMITTING AN APPLICATION**

**EFFECTIVE: March 2023** 

**ELECTRONIC APPLICATION DEADLINE: October 16, 2023** 

AMERICAN CANCER SOCIETY, INC.

**Extramural Discovery Science Department** 

Program Contact: Kim Clarke (kimberly.clarke@cancer.org)

#### **MISSION**

The American Cancer Society's mission is to save lives, celebrate lives, and lead the fight for a world without cancer.

# **Table of Contents**

GE	ENERAL INFORMATION	3
1.	ACCESSING THE GRANT APPLICATION SYSTEM	3
2.	FORMATTING THE APPLICATION	3
3.	UPDATES OF INFORMATION	4
4.	REQUIRED INFORMATION	4
5.	CHERC GENERAL AUDIENCE SUMMARY	6
6.	STATEMENT OF CANCER RELEVANCE AND IMPACT	7
7.	SELECTION OF RESEARCH PRIORITIES	7
8.	JUSTIFICATION OF PROJECT ALIGNMENT TO ACS RESEARCH PRIORITIES	7
9.	PROJECT CODING	8
10	. ASSURANCES AND CERTIFICATION	8
11	. PI DATA	9
12	. RESUBMISSION	9
13	. APPLICATION SUBMISSION AND REQUIRED E-SIGNATURES	9
	PECIFIC INSTRUCTIONS BY GRANT MECHANISMS	
CA	NCER HEALTH EQUITY RESEARCH CENTER	10
O۱	/ERVIEW OF SUB-AWARD REQUIREMENTS	18
GE	ENERAL INFORMATION FOR SUB-AWARD GRANT MECHANISM APPLICATIONS	19
RE	SEARCH SCHOLAR GRANT	21
CL	INICIAN SCIENTIST DEVELOPMENT GRANT	31
PC	STDOCTORAL FELLOWSHIPS	40
F۷	ALUATION OF CHERC APPLICATIONS	45

#### **GENERAL INFORMATION**

#### 1. ACCESSING THE GRANT APPLICATION SYSTEM

Once your LOI is approved in proposalCENTRAL, an application will be created for you and the Sub-Award PIs. The application will appear in the active "proposals" section of each PI's proposalCENTRAL account.

#### The Key Steps for Starting an Application:

- Edit Application: Click on "Edit". Enter a Project Title and click SAVE.
- Accessing Application Sections: After clicking SAVE, you will have access to all application components.

**Enable Other Users to Access this Proposal:** Allow others (e.g., institutional administrators or collaborators) to view, edit, or submit your proposal by following these steps:

- Click the "Enable Other Users to Access this Proposal" section.
- Add their e-mail address at the bottom and click the Find User button. The User must have a proposalCENTRAL account to be added.
- Select the appropriate access level from the drop down in the "Permissions" column and click the Accept Changes button. The possible access levels are:
  - View: View only; cannot change any details.
  - o **Edit:** Can view and change information in the application; cannot submit the application or view the "Enable Other Users to Access this Proposal" screen.
  - Administrator: Can view, edit, and submit the application; can give access rights to others on the "Enable Other Users to Access this Proposal" section.

**Technical Assistance:** Detailed information is available through tutorials provided on the proposalCENTRAL login page. If you have problems accessing or using the electronic application process, click on "Help" or contact ALTUM Customer Service at pcsupport@altum.com or 1-800-875-2562.

#### 2. FORMATTING THE APPLICATION

- Insert Principal Investigator (PI) name in the header for each template of the application.
   For Center-specific templates, the CHERC PI should be listed. For Sub-Awards, the Sub-Award PI's name should be listed below the CHERC PI.
- **Type size:** Use 12-point Times New Roman or 11-point Arial as the minimum font size for the text of the application; 10-point Times New Roman or 9-point Arial font type may be used for figures, legends, and tables.
- Application documents may be single- or double-spaced (if single spacing, enter a space between paragraphs).
- Margins: ≥ 0.5 inches all around unless a form with different margins is supplied in the Application Templates.
- **Do not number:** Title/Signature Page, Contact Page, General Audience Summary, Structured Technical Abstract, and Statement of Cancer Relevancy and Impact, Justification of Alignment to Research Priorities, Budget & Justification, or the Appendix.
- Page Numbering: Number the pages in the upper right corner according to the proposal sections listed in the Table of Contents.

#### 3. UPDATES OF INFORMATION

The following updates should be communicated to Kim Clarke, PhD the Director of Special Programs and Projects via kimberly.clarke@cancer.org.

**Withdrawal of Application:** Notify the program contact promptly of your intent to withdraw your application. Include in your email, the PI name, application number (if assigned), and reason for withdrawal. If the project has been funded by another organization, please list that funding agency.

**Change of Address:** Notify the program contact if a mailing address, email address, or phone number has changed since a submission. Include the PI name and application number (if assigned) on the correspondence and update your information in proposalCENTRAL.

**Change of Institution:** If you change institutions between application submission and peer review, notify the program contact to inquire how this may impact eligibility and the review.

#### 4. REQUIRED INFORMATION

**Note:** Not all fields are required for all applications; see grant-specific instructions.

**Project Title:** Do not exceed the character limit shown in proposalCENTRAL, including spaces; avoid abbreviations if possible. Note: The title will be truncated after 81 characters on the title page.

**Principal Investigator/Applicant Information:** Some (or all) of the required information from your Professional Profile may already be displayed. If any information is outdated, stop, and update the Professional Profile before completing this section and submitting an application. Please keep all contact information current.

**Key Personnel:** Individuals who contribute to the scientific development or execution of a project in a substantive and measurable way (whether or not they receive salaries or compensation under the grant) are considered Key Personnel. The PI is always considered Key Personnel, but do not list them under key personnel on proposalCENTRAL. Key Personnel can include individuals at the master's or baccalaureate level (such as graduate students and research assistants) if they meet this definition. "Zero percent" or "as needed" are not acceptable levels of involvement for key personnel. The Center application should include all key personnel for Center and Sub-Awards because only one application will be submitted in the system.

**The Principal Investigator** assumes the authority and responsibility to direct the project. The ACS does not permit applications to be directed by co-Principal Investigators or multi-Pls.

**A Co-Investigator** is a vital scientific contributor (at the same or a different institution), often bringing a needed expertise to the research team. This person commits some level of measurable effort to the project and is therefore Key Personnel, whether compensated or not.

**A Collaborator** plays a lesser role in the thinking and logistics of the project than co-investigator. Depending on the role and effort, a collaborator may be designated as Key Personnel and may be compensated.

**A Consultant** provides expert advice most often for a fee. If the consultant contributes to the scientific development or execution of a project substantively and measurably, he or she should be designated as Key Personnel.

**Other** is defined as individuals who are compensated for their contribution to the project but are not considered Key Personnel (e.g., student assistants, technical staff).

**A Mentor** assists in the scientific and professional development of the mentee. A Primary Mentor should be identified and listed as Key Personnel ONLY for Postdoctoral Fellowships and Clinician Scientist Development Grants. If additional mentors are identified, they should also be listed as Key Personnel.

The table below provides information about the documents required for each personnel class. See grant-specific instructions for detailed guidance.

#### REQUIRED SUPPORTING DOCUMENTS FOR NAMED PERSONNEL

Personnel	Designated "Key"	Biosketch	"Other Support" Documentation	Included in Budget & Justification	Letters
Principal Investigator	Yesª	Yes	Yes	Yes	N/A
Co- Investigator	Yes	Yes	Yes <sup>b</sup>	Yes <sup>c</sup>	Letter of Agreement/Support <sup>b</sup>
Collaborator	Yes	Yes	Yes <sup>b</sup>	Yes <sup>c</sup>	Letter of
Collaborator	No	No	No	No	Agreement/Support <sup>b</sup>
Consultant	Yes	Yes	Yes, if paid <sup>b</sup>	Yes, if paid <sup>c</sup>	Letter of
Consultant	No	No	No	Yes, if paid	Agreement/Support <sup>b</sup>
Other	No	No	No	Yes	No
Mentor(s)d	Yes	Yes	Yes	Yes <sup>d</sup>	Letter of Agreement/Support

<sup>&</sup>lt;sup>a</sup> The PI is always considered Key Personnel but supporting documents should **not** be duplicated in the Key Personnel section on proposalCENTRAL.

**Citizenship Status (mandatory):** On proposalCENTRAL under "Professional Profile", indicate your current citizenship status and country of citizenship.

**Justification of Eligibility:** Applicants must satisfy all eligibility requirements defined for each application type. Under Professional Profile, indicate the date (months and year) your terminal degree was awarded and when your first independent faculty position (or equivalent) began, if applicable. If you have a letter from the ACS Eligibility Committee, include in the Appendix and indicate this in the Table of Contents.

**Space:** If applicable, indicate the approximate area of independent research space provided by your institution to support your research program, along with the name of the department head

<sup>&</sup>lt;sup>b</sup> For postdoctoral fellows, technicians, and graduate students, other support documentation is not required.

<sup>&</sup>lt;sup>c</sup> If Key Personnel are not being paid, enter \$0 for the amount requested; percent effort is required. Note that the percent effort indicated on the budget tool in proposalCENTRAL can be different than the requested compensation.

<sup>&</sup>lt;sup>d</sup> For the mentored grants (i.e., CSDG, PF), include the Primary Mentor and other mentors, if applicable, as Key Personnel and include the mentor(s) in the budget/budget justification.

who can verify this commitment. You must insert a value for square footage under Professional Profile, even if that number is zero.

**MSI Designation:** Indicate using the radio buttons whether the Pl's institution is a US Department of Education designated Minority Serving Institution (MSI). If yes, then select the type of MSI from the dropdown list. Some common MSI combinations are provided in the dropdown menu, but the list is not exhaustive. Use the text box to enter the type if your institution's MSI or combination is not in the list.

#### MSIs and Abbreviations:

- ANNH: Alaska Native and Native Hawaiian
- AANAPISI: Asian American and Native American Pacific Island Serving Institution
- HSI: Hispanic Serving Institution
- HBCU: Historically Black Colleges and Universities
- NASNTI: Native American Indian Serving Non-Tribal Institution
- PBI: Predominantly Black Institution
- TCU: Tribal Colleges and Universities

**Institutional Official:** Indicate the name and address of the official authorized to sign for the institution. Institutional Officials may electronically sign the application if required by the institution, but this is not required by ACS for submission. The PI must give the Institutional Official access to the application for e-signing to be completed. Provide a mailing address for disbursement of funds, in the event that your grant is awarded funding.

**Technology Transfer Officer (TTO):** Indicate the name and email address of the TTO. The TTO is responsible for **technology** transfer and other aspects of the commercialization of research that take place at a **university**. The TTO will be responsible for annually reporting all IP updates to the ACS should the project be awarded funding.

**Department Chair:** Indicate the name, department, and email address of the Department Chair. The electronic signature of the Department Chair is not required by the ACS.

Primary Mentor: Complete all fields for mentor information (PF and CSDG only).

Additional Mentor(s): Complete all fields for additional mentor information (PF and CSDG only).

ORCID Identifier: ORCID provides a persistent digital number that you own and control, and that identifies you from every other researcher. Please provide an ORCID identifier if you have one. To add the ORCID ID, click Professional Profile and connect/register for an ID. Once connected, return to your proposal, and click Save.

#### 5. CHERC GENERAL AUDIENCE SUMMARY

For the CHERC application, a General Audience Summary is required. The general audience summary provides an overview of the proposed Center for people who are not trained in the sciences. This summary may be read by peer review stakeholders, ACS staff members, potential donors, and the public. Stakeholders are individuals without formal scientific or medical training who are full voting members of peer review panels.

- The **stakeholder** uses the general summary to evaluate how the proposed work will benefit cancer patients, their families, and the community.
- ACS staff members use these summaries to identify projects that align with the specific interests of **donors** and may share them with donors.

• Staff may use the summary for communicating to local media about ACS-funded studies. Summaries of all grants funded by the Society are also made available to the **public**. Therefore, do not include proprietary/confidential information.

The general audience summary should be written in an understandable way for the general public. Describe concisely the goals of the Center, the cancer health disparity(ies) the Center will be focused on, including the social determinants of health that you believe are driving the cancer health disparities in your local or regional area, and the potential impact of the proposed Center in the local and regional community on cancer health disparities. If symbols or Greek characters must be used, they should be spelled out to avoid formatting problems.

This form is limited to 3,100 characters including spaces and will truncate at that point. Comply with the character limit to permit readers (including peer reviewers) to fully appreciate the "big-picture perspective" of the proposal.

#### 6. STATEMENT OF CANCER RELEVANCE AND IMPACT

This section is important to the stakeholders (non-scientific members) on the peer review committees as well as to several general audiences, including donors. Avoid the use of technical jargon. This form is limited to 1500 characters, including spaces, and will truncate at that point.

Describe how the Center will contribute short- and long-term to the control of cancer. For basic studies relying on experimental models (rather than human cancer cells, tissues, or clinical data) explain how the successful completion of the proposed work will lead to a better understanding of the disease or improve our ability to prevent, detect, treat or manage cancer or cancer patients.

For studies involving human subjects, what do you expect to learn about how access to care impacts the overall cancer burden? How could your study improve both delivery of care and cancer outcomes? What effects do you anticipate on the morbidity, mortality, and/or quality of life of your study population? How might further investigations find potential value for health policy?

#### 7. SELECTION OF RESEARCH PRIORITIES

Select the "health equity" research priority. Additional priorities may be selected if the proposed CHERC aligns with them, but this is not required. Indicate the percent alignment. If multiple priorities are selected, the total should equal 100%. Descriptions of the research priorities can be found in the CHERC RFA Policies document with further details on cancer.org.

#### 8. JUSTIFICATION OF PROJECT ALIGNMENT TO ACS RESEARCH PRIORITIES

Explain how your proposed project aligns to the selected research priority/priorities. This form is limited to 1500 characters, including spaces, and will truncate at that point. See <a href="here on cancer.org">here on cancer.org</a> for a listing, descriptions, and specific examples of research that may fall under the ACS priority areas. If your project aligns to multiple priority areas (not a requirement), provide additional justification of the alignment to those areas in this section as well. Please make sure that the priority area or areas are clearly stated. We welcome projects all along the research continuum if they meet these important criteria. See Appendix C of the <a href="All Grant Applications">All Grant Applications</a> <a href="Instructions">Instructions</a> for examples.

Organize this justification into the following sections:

- ACS Priority Alignment
- Priority Area(s) and Percent Breakdown (for example: Treatment 50%; Etiology 50%)

Alignment with RFA Goals

#### 9. PROJECT CODING

Note: Project coding is not considered at peer review. Red asterisks indicate required fields; not all grant types require project coding.

Donors often have interests in funding specific types of cancer research. Your selection of project codes permits identification of proposals for consideration of donor-driven special funding. This information also assists the Society in communicating our research portfolio to the public.

Select the most appropriate Areas of Research (Common Scientific Outline—CSO) and Types of Cancer. Note that relevant items may be included under Resources and Infrastructure Related to [specific area]. See Appendix D of the <u>All Grant Application Instructions</u> for specific terms and examples.

#### 10. ASSURANCES AND CERTIFICATION

All activities involving human subjects and vertebrate animals must be approved by the appropriate institutional committee before the application can be funded. Compliance with current US Department of Health and Human Services and ACS guidelines for conflict of interest, recombinant DNA, and scientific misconduct is also required.

**Vertebrate Animals:** Every proposal involving vertebrate animals must be approved by an Institutional Animal Care and Use Committee (IACUC), in accordance with Public Health Service Policy on Humane Care and Use of Laboratory Animals before the application can be funded. Enter the date of the most recent IACUC approval in the space provided.

All research supported by the ACS (including subcontracted activities) involving vertebrate animals must be conducted at performance sites covered under an approved Animal Welfare Assurance. It is the responsibility of the institution to immediately report to the ACS any action, including recertification or loss of IACUC approval, that is pertinent to the work described in the grant application.

**Human Subjects:** All proposed research projects involving human subjects must be approved by an Institutional Review Board (IRB) at an institution approved by the Office for Human Research Protections (OHRP) of the US Department of Health and Human Services (DHHS). Enter the institution's Assurance of Compliance number(s). Copies of the DHHS policy, assured status, and assurance numbers may be obtained from OHRP. Definitions and further clarification can be found at the NIH Office of Extramural Research website.

**Submission of Approval Documentation:** If institutional review of human or vertebrate-animal subjects has not been finalized before the submission date of the application, you must indicate that approval is pending on the certification page and give the appropriate institutional reference numbers, if available. The Institution Official who signs during the grant activation process is responsible for confirming that approval has been granted for the research to begin. In addition, certification of the approval, clearly labeled with the assigned ACS application number, must be uploaded to proposalCENTRAL within 3 months of grant activation. Failure to comply may result in withholding of payments and/or cancellation of funding.

If a grant is funded, it is the responsibility of the institution to immediately report to the ACS any action, including recertification or loss of IRB approval, which occurs during the term of the award that is related to the work described in the grant application.

#### 11. PI DATA

The PI demographic information is for use by the Extramural Discovery Science department. While "choose not to disclose" is an option, we **strongly encourage** all applicants specify their gender, race, ethnicity, and sexual orientation. We use this information for statistical purposes to understand the diversity of our applicant pool. We are committed to investing in a diverse research workforce and this data enhances our ability to develop inclusive policies and new funding opportunities to address current limitations. *This information is not accessible to peer reviewers and is not considered at peer review.* By sharing this information with us, you help the American Cancer Society track our progress and identify areas that need improvement.

#### 12. RESUBMISSION

**All resubmissions must create a new application in proposalCENTRAL.** CHERCs may be resubmitted 2 times, RSGs and CSDGs may be resubmitted 2 times, PFs may be resubmitted 1 time.

# **Resubmission guidelines:**

- Submit a complete application electronically via proposalCENTRAL.
- The title of the project can be altered but must be marked as a first or second resubmission.
- Select the appropriate application number from the list of your prior submissions on proposalCENTRAL.
- Provide the peer review committee code (CHERC) from the previous application on the title page.
- Since the CHERC application consists of a Center application and individual Sub-Award applications, depending on the outcome of the initial review, we may request that individual Sub-Award applications resubmit instead of the entire CHERC application. The program contact will communicate this decision, if applicable.

# 13. APPLICATION SUBMISSION AND REQUIRED E-SIGNATURES

#### We are now only accepting electronic submissions with e-signatures.

- All application attachments, including the Appendix, must be uploaded as .pdf documents.
- Validate the application on proposalCENTRAL. An application that has not been validated cannot be electronically submitted.
- Applications must be electronically submitted on proposalCENTRAL by 11:59 PM ET on the specified deadline date. If the deadline falls on a weekend or holiday, applications will be accepted the following business day.
- The applicant's electronic signature is required on the Signature Page. The e-signature of the Institution Signing Official and the Department Head are optional but available for use should the institution require them. To e-sign an application, the signees must be included in the application Contacts in proposalCENTRAL.
- Technical questions regarding the electronic application process should be directed to Altum at https://proposalcentral.com/ or 1-800-875-2562.

**Note:** After submission, you will not be able to make any changes to the forms or upload any modifications to the files.

# SPECIFIC INSTRUCTIONS BY GRANT MECHANISMS CANCER HEALTH EQUITY RESEARCH CENTER

#### I. PREPARING THE APPLICATION

The Center PI is responsible for submitting the Center application materials and the Sub-Award applications. Each full Sub-Award application should be uploaded individually as a Sub-Award Application attachment type in the Center application.

Templates for the CHERC are provided on proposalCENTRAL. All templates must be saved and uploaded as a PDF.

#### II. APPLICATION TEMPLATES

An application consists of several sections that must be uploaded before the application is submitted. Templates for these sections are available once an application is started on proposalCENTRAL.

The templates must be downloaded to a computer and completed offline. Detailed below are the instructions for completing the individual sections. The sections must be converted into .pdf documents before being uploaded. Please see proposalCENTRAL's FAQ or call support at 1-800-875-2562 if you need assistance.

# 1. TABLE OF CONTENTS (PAGE 1.1)

The Table of Contents is pre-numbered and should be limited to 2 pages, including an itemized list of the contents in the Appendix.

# 2. REPLY TO PREVIOUS REVIEW (PAGE 2.1)

IF THE APPLICATION IS A NEW SUBMISSION, upload the provided template with "Not Applicable" in the body.

All resubmissions must create a new application on proposalCENTRAL.

For resubmissions, address the points raised in the previous critiques and direct the reviewer to the specific sections of the text, figures, or tables where edits have been made. Revisions should be easily identifiable in the revised application (e.g., bold type, italicized, underline, etc.). This section should not exceed 3 pages.

#### 3. PREVIOUS CRITIQUES (RESUBMISSIONS ONLY)

Include a copy of the reviewer's critiques with your resubmitted application. In proposalCENTRAL, go to the "Submitted" page, select "View Review Info," click "Print" to save it as a .pdf. Upload the document to your new application with the other proposal sections.

# 4. DESCRIPTION OF THE CANCER HEALTH EQUITY RESEARCH CENTER (PAGE 3.1)

In *no more than 3 pages*, provide a brief description of the institution, including the mission, history, and degree granting programs. Information regarding Institution resources and facilities should be described in the Environment Section.

Describe the vision, goals, and activities of the CHERC, the local or regional community it is designed to support, how the Center will obtain its goals, and what the Center's impact will be on its community.

The activities of the Center may also include career development plans for junior faculty and early career scientists or other activities that are important to the development and maintenance of the CHERC at the institution and within the community.

**References (if applicable):** Listed numerically, in order of their appearance in the text. Each reference listed must include the title, names of all authors, book or journal, volume number, page numbers, and year of publication. References are not included in the page limit.

## 5. BIOGRAPHICAL SKETCH OF CHERC PI (PAGE 4.1)

Complete the NIH Biosketch template. Follow the formats and instructions provided by the NIH.

#### 6. CHERC PI (PAGE 5.1)

In *no more than 3 pages*, provide information about the Center Principal Investigator (PI)'s qualifications to serve in this role. The Center PI must have attained the rank of Associate Professor or Full Professor, have a track record of cancer research funding, mentoring junior investigators, publications in peer-reviewed journals, and administrative/leadership experience (i.e., deputy director or director of a program, center or department). Assistant Professors who have led large R-level or equivalent grants and have held health leadership positions may apply.

**Note:** The CHERC PI cannot be a recipient of a Sub-Award. A minimum of 10% effort is required for the Center PI. Salary support can be budgeted as a line item; or salary can be in-kind.

#### 7. RESEARCH SUPPORT (PAGE 6.1)

List all sources of research support, Federal, non-Federal or Institutional, available to the CHERC PI through research grants, cooperative agreements, contracts, fellowships, and other means. Describe all awards, active support, and all applications pending review. Give the name of the granting agency, grant number, project title, award amount and term, your role (e.g., principal investigator, co-investigator, collaborator), and your percent effort.

### 8. COMMUNITY ADVISORY BOARD (PAGE 7.1)

No minimum number of members. Advisory Board members should represent the Stakeholders of the community and can be at all levels of professional or executive leadership. The expertise of the Community Advisory Board should align with the Center's goals and the proposed deliverables of the CHERC and the Sub-Award projects. Additionally, members of the local ACS should be invited to Advisory Board meetings.

Plans for Collaborative Engagement (up to 3 pages): Describe how the Community Advisory Board will function and be integrated within the Center and Sub-Awards to achieve the CHERC's goals and vision within its community. Include responsibilities of Community Advisory Board members such as: decision making and problem-solving processes; monitoring and reporting progress; meeting mode and frequency; and communication strategy for planning and dissemination of findings.

# 9. ENVIRONMENT (PAGE 8.1)

Describe institutional resources and facilities to support research, training, and mentoring. The PI should also describe how resources at local/regional institutions will be leveraged, if applicable. Describe how the presence of these resources will directly benefit the CHERC, the Sub-Awards, and the team members.

Document the existence of an appropriate academic and research environment for the proposed research studies and training programs, including:

- departmental and other institutional personnel
- ongoing research and other relevant activities
- facilities and resources
- relevant collaborative relationships
- any relevant accreditation from professional societies or organizations.

# 10. TIMELINE AND PLANS FOR KNOWLEDGER TRANSFER (PAGE 9.1)

- Center Timeline: Include a timeline with milestones for the project period.
- Plans for Knowledge Transfer (required): Clearly define your plan about how the results of the Center will be used to develop future research, and the Center's practical benefit in the local or regional community or the public's health in general.
- 4 page maximum

### 11. BIOGRAPHICAL SKETCHES FOR KEY PERSONNEL (PAGE 10.1)

Complete the NIH Biosketch template for all Center-specific Key Personnel. Key Personnel associated exclusively with a Sub-Award project should be included in the application materials for the Sub-Award. **Note:** Follow the formats and instructions provided by the NIH.

# 12. LIST OF LETTERS OF SUPPORT FROM COLLABORATORS/CONSULTANTS (PAGE 11.1)

Provide a list of collaborators and consultants on the template, indicating their name, title, and role. If there are no collaborators/consultants for the Center, enter "Not Applicable" on the template, and upload to proposalCENTRAL.

Each collaborator or consultant should outline the role they will play in a letter with sufficient details for evaluation of the value of the individual contribution. The letters should be uploaded as .pdfs to proposalCENTRAL under the "Letters of Support from Collaborators" attachment type.

#### 13. STATEMENT OF INSTITUTIONAL SUPPORT (12.1)

The Department Chair (or equivalent) should provide the following information and any pertinent supporting documentation for the CHERC Principal Investigator only:

- Details of the institutional commitment to support the applicant's salary and research program, and the resources available to support the Center PI.
- The current term of the applicant's appointment.
- For non-tenure track applicants, additional descriptions of the space and resources committed to the project should be highlighted.

### 14. COMPLIANCE STATEMENTS (PAGE 13.1-13.3)

#### **Human Subjects**

**Selection of study population.** When conducting research on humans, provide the rationale for selecting your target population. Include the involvement of children, minorities, and especially vulnerable populations such as neonates, pregnant women, prisoners, institutionalized individuals, or others who may be considered vulnerable populations or others who may be considered vulnerable populations. The institution is required to ensure IRB approval is obtained for the grant to start, and the approval documentation is uploaded into proposalCENTRAL within 3 months of grant activation.

The CHERC PI should describe the oversight for human subjects and provide information regarding the study population across all Sub-Awards. **Note:** Each Sub-Award PI will be responsible for submitting compliance statements specific to their Sub-Award application.

On the planned enrollment form, estimate the total number of subjects by primary ethnicity and race, race/ethnicity subgroup (if applicable), and gender. Include a rationale for excluding any population. Estimate the planned enrollment based on these calculations.

Also include estimates of the sample distribution by gender, race, and ethnicity (if available). For example, if your sample size is 200, to complete the total number of subjects column by race (based on what you know about the population demographics or the existing dataset you plan to analyze), multiply by the estimated percentage.

Estimated percentage of the	Estimated total number of	
population by race	subjects	
50% White	100 (200 x 0.50)	
49% AA	98 (200 x 0.49)	
1% Asian	2 (200 x 0.01)	

For applicants performing research with non-human subjects, check the box that most appropriately describes your research.

**Potential benefits, risks, and knowledge gained.** Succinctly describe the potential benefits and risks to subjects (physical, psychological, financial, legal, or other). Explain why the risks are reasonable in relation to the anticipated benefits, both to research participants and others. Where appropriate, describe alternative treatments and procedures, including the risks and potential benefits to participants.

Research specimens and data. If the proposed research involves biospecimens, explain how the research material will be obtained from living subjects and what materials will be collected. List any specific non-biological data, such as demographic information, and how it will be collected, managed, and protected. Specify who will have access to such data and what measures you will maintain to keep personally identifiable private information confidential.

**Collaborating sites.** Where appropriate, list any collaborating sites where research on human subjects will be performed and describe the role of those sites and collaborating investigators in performing the proposed research. Explain how data from the site(s) will be obtained, managed, and protected.

**Note:** See the Department of Health and Human Services Office of Research Protection Subparts B-D for additional protections for vulnerable populations.

http://www.hhs.gov/ohrp/policy/populations/index.html.

#### **Vertebrate Animals**

IACUC approval must be obtained before animal work begins. An IACUC approval letter must be uploaded to proposalCENTRAL immediately upon approval.

Provide your rationale for using live vertebrate animals including the:

- Necessity for using the animals and species proposed;
- Appropriateness of the strains, ages, genders of the animals to be used;
- Justifications for, and appropriateness of, the numbers of animals proposed. When completing the Targeted Enrollment Table, select non-human subjects research and check the box that most appropriately describes your research.

#### **Biohazards**

Briefly describe whether any materials or procedures proposed are potentially hazardous to research personnel, equipment, and/or the environment. What protections will mitigate such risks? Include biological and chemical hazards, if applicable.

#### <u>Authentication of Key Biological and/or Chemical Resources</u>

Briefly describe methods to ensure the identity and validity of key biological and/or chemical resources to be used in the proposed studies. These resources may or may not be generated with ACS funds and:

- may differ from laboratory to laboratory or over time;
- may have qualities and/or qualifications that could influence the research data; and
- must be integral to the proposed research.

These may include, but are not limited to, cell lines, specialty chemicals, antibodies, and other biologics. Researchers should transparently report how they have authenticated key resources, so consensus can emerge.

Standard laboratory reagents that are not expected to vary do not need to be included in the plan (e.g., buffers and other common biologicals or chemicals). After reviewers assess the information you provide in this Section, their questions will need to be addressed prior to an award.

In this section, focus only on authentication and/or validation of key resources to be used in the study. Include all other information within the page limits of the research strategy. Applications that fail to comply may be dismissed.

#### 15. APPENDIX TO APPLICATION

Use the Appendix to submit other key documents as part of the application. Required materials are specified. Other supporting materials can be included as needed.

- A letter of collaboration with the ACS region is required with the application
- Recent reprints or preprints (optional)
- Logic Model **Required**

It is not necessary to number the pages of the Appendix, but please list by categories (e.g., reprints, preprints) in the Table of Contents.

#### 16. LETTERS OF RECOMMENDATION FOR MENTORED SUB-AWARD APPLICATIONS

The Center PI must enter the name and contact information for the recommendation letter writers for any mentored Sub-Award applicant (CSDG and PF) in proposalCENTRAL. Once their information is entered, the letter writers can access the site to upload their letters. Instruct the letter writers to include the Sub-Award candidate's name in the title of the letter.

This step may be skipped only if there are no mentored Sub-Awards (i.e., only RSG Sub-Awards) in the CHERC application. The recommendations letters are *required* for all mentored grant applications.

#### 17. SUB-AWARD APPLICATIONS

Sub-Award Applications, submitted individually as pdf files – Required

Each Sub-Award will be prepared by the Sub-Award PI in proposalCENTRAL, but following verification, the Sub-Award PI should save the application as a .pdf. This file must then be uploaded into the Center application under the "Sub Award Application" attachment type.

#### 18. DETAILED BUDGET

Complete the budget page located online at proposalCENTRAL for the Center and all Sub-Award applications. Use the "tagging" feature (i.e., a drop-down list on the right side of the budget page) in proposalCENTRAL to accurately associate each line item with the Center PI or a Sub-Award PI. Each Sub-Award PI must be entered in the Sub-Award PI section to appear in the drop-down menu.

**Project Period and Start Date:** CHERCs are for a maximum of 4 years. Use a grant start date of July 1, 2024.

**Allocation and Expenditure of Funds:** Funds for all Research Grant Sub-Awards must be overseen by the Center PI. See the above Allowable Expenditures Policy for more information on allowable expenses.

**Note:** Each Sub-Award PI will submit a budget and justification for their project, but the Center PI is responsible for submitting a <u>comprehensive</u> CHERC budget for all Center activities, Center Personnel, Sub-Awards, and Subcontracts using the proposalCENTRAL budget section.

A. Personnel. Names and positions of all Key Personnel must be individually listed, and the precent effort for all key persons should be entered. List all Key Personnel for the Center application as well as all Sub-Award applications, whether they are receiving compensation or not (i.e., in kind). For CSDG and PF Sub-Awards, the primary mentor and any additional mentors should also be listed. Details of contractual arrangements with Key Personnel should be provided in the Budget Justification section.

Sub-Award PIs must be selected at the time of application. However, members of a Sub-Award research team or other CHERC staff that have not been selected should be listed as "vacancy." Personnel may receive salary support up to a maximum that equals the NIH salary cap, prorated according to their percent effort on the project. If a Key Person is not receiving salary, you can request \$0 for salary, but their percent effort is still required. Their effort and contribution to the project should be outlined in the Budget Justification even if they are not being compensated.

The costs to the institution of employee fringe benefits should be indicated as a percent of the employee's salary. The amount of fringe benefits requested must be prorated to the salary

requested. For example, if 50 percent of an individual's annual salary is requested, then no more than 50 percent of that individual's annual cost for fringe benefits can be requested.

#### B. Equipment

- Permanent equipment: Defined as items of nonexpendable property with a purchase
  cost per unit that equals or exceeds \$5,000 with a useful life of more than one year. List
  separately and justify the need for each item of permanent equipment. Note: the cost of
  permanent equipment is not included in the direct cost total used to calculate indirect
  costs.
- Small or expendable equipment: Defined as expendable property with a purchase cost
  per unit that is less than \$5,000 and/or that has a short service life (<1 year). Note: the
  cost of small or expendable equipment should be included in the direct costs total used to
  calculate indirect costs.</li>
- General purpose equipment: Equipment such as computers used primarily or
  exclusively in the actual conduct of the proposed scientific project are considered direct
  costs and may be included in the direct cost total used to calculate indirect costs.
  Computers or other general-purpose equipment that will be used on multiple projects or
  for personal use are not allowable expenditures.
- **C. Supplies.** Group supplies into major categories (e.g., glassware, chemicals, radioisotopes, survey materials, animals, etc.).
- **D. Travel.** Domestic travel only; special consideration will be given for attendance at scientific meetings held in Canada. The Center PI and Sub-Award PIs should budget at least \$1500 per year for travel to an ACS restreat.
- **E. Miscellaneous Expenditures.** List specific amounts for each item. Examples of allowed expenditures include publication costs and special fees (e.g., pathology, computer time and scientific software, and equipment maintenance).
- **F. Subcontracts.** If any portion of the proposed research is to be carried out at another institution (Sub-Awards are not included here), enter the total direct costs on the online budget detail page on proposalCENTRAL. Each subcontract should be listed separately. Then provide a categorical breakdown of costs using the Subcontractor Budget and Justification form, using one form per subcontractor. Upload the form(s) when complete, entering the subcontractor's name in the "describe attachment" field.
  - Subcontracts for the research project may be with public or private institutions, provided they do not violate ACS policies. Subcontracts involving a contractor residing outside the borders of the United States are not permitted, unless the applicant can document that it is not feasible to have the work performed within the United States.
  - Administrative pages: A Letter of Agreement between institutions pertaining to the subcontract should be included in the Appendix.
- **G. Indirect Costs.** Indirect costs must not exceed 20% based on total direct costs for the CHERC, excluding permanent equipment. Indirect costs may be claimed for Sub-Awards if the Sub-Award is at an Institution other than the CHERC Institution. If a Sub-Award is at a non-CHERC institution, the allowable indirect costs are 20% for RSGs and 8% for CSDGs. Indirect costs cannot be recovered from PFs. If there is a subcontract(s), indirect costs can

be provided to the secondary institution through negotiation with the Principal Investigator's institution but the total amount of indirect costs, inclusive of subcontracts, may not exceed 20% of the award for RSGs or 8% of the award for CSDGs. If a subcontract is receiving indirect costs, list the indirect costs for each institution separately in the indirect costs section of the proposalCENTRAL budget form.

**Note:** Applicants should not budget above or below the allowable indirect cost rate.

**H. Total Amount Requested.** Budget totals should reflect a maximum duration of 4 years. The total amount requested for the project period should match the total costs on the Title Page of the application.

**Note:** For budgets that do not request the maximum allowable amount, if the grant is funded, the ACS will round the total to the nearest thousand dollars. We encourage applicants to request a budget amount that is rounded to an even thousand dollars.

#### **16. JUSTIFICATION OF BUDGET**

Justify all items of permanent equipment costing over \$5,000, as well as your needs for personnel, supplies, travel, and other miscellaneous items. If the budget includes a request for funds to be expended outside the United States or its territories, include an explanation of why such costs are essential for the successful conduct of the project, and why there are no alternatives. Provide details of contractual arrangements with key personnel in this section.

# **OVERVIEW OF SUB-AWARD REQUIREMENTS**

Sub-Award Grant Mechanism	Eligibility Requirements
Postdoctoral Fellowship	1.) US Citizen or non-US citizen with appropriate visa; 2.) Be within 4 years of receiving terminal doctoral degree
Clinician Scientist Devel. Grant	1.) Have clinical license and have a role in patient care; 2.) Be within first 6 years of starting faculty position (e.g., Instructor or Assistant Professor; 3.) Cannot have more than 3 years of prior postdoctoral mentored research training
Research Scholar Grant	1.) Terminal doctoral degree or equivalent; 2.) Independent investigator/researcher at any career stage

Sub-Award Grant Mechanism	Award Amount	Term
Postdoctoral Fellowship	\$143,500 for 2 yr / \$209,500 for 3 yr	2 or 3 years
Clinician Scientist Devel Grant	\$135k/year; \$540k maximum	4 years
Research Scholar Grant	\$200k/year; \$800k maximum	4 years

Sub-Award Grant Mechanism	Application Materials	Page Limits
	Candidate Biosketch	5 pages
	Training Potential/Career Goals	3 pages
Postdoctoral Fellowship	Research Plan	9 pages
Postdoctoral Fellowship	Mentoring and Training Plan	3 pages
	Compliance	No page limit
	Recommendation Letters	3 Letters (no page limit)
	Candidate Biosketch	5 pages
	Experience/Career Goals	3 pages
Clinician Scientist	Research Plan	13 pages
Development Grant	Mentoring and Training Plan	5 pages
Development Grant	Compliance	No page limit
	Recommendation Letters	3 Letters (no page limit)
	Budget	No page limit
	Candidate Biosketch	5 pages
Research Scholar Grant	Research Plan	13 pages
Nesearch Scholar Grant	Compliance	No page limit
	Budget	No page limit

#### GENERAL INFORMATION FOR SUB-AWARD GRANT MECHANISM APPLICATIONS

**NOTE:** See Section II above for information regarding proposal formatting, required information, and other general details. Requirements for individual Sub-Award application templates are provided below.

#### 1. GENERAL AUDIENCE SUMMARY

The general audience summary provides an overview of the proposed research for people who are not trained in the sciences. This summary may be read by peer review stakeholders, ACS staff members, potential donors, and the public. Stakeholders are individuals without formal scientific or medical training who are full voting members of peer review panels. The stakeholder uses the general summary to evaluate how the proposed work will benefit cancer patients and their families.

- ACS staff members use these summaries to identify projects that align with the specific interests of donors and may share them with donors.
- Staff may use the summary for communicating to local media about ACS-funded studies. Summaries of all grants funded by the Society are also made available to the public. Therefore, do not include proprietary/confidential information.

The general audience summary should not duplicate the structured technical abstract and should be written in an understandable way for the general public, so they can fully appreciate the "big-picture" perspective of the proposal. Describe concisely the background, significance, question(s) being asked, information to be obtained, potential impact of your proposed research, and how the project is integrated into the CHERC. If symbols or Greek characters must be used, they should be spelled out to avoid formatting problems. See examples of General Audience Summaries in Appendix A of the All Grant Application Instructions.

The abstract field is limited to 3,100 characters, including spaces, and will truncate after that point.

#### 2. STRUCTURED TECHNICAL ABSTRACT

The structured technical abstract is a summary of the proposed research or scholarly project for **general scientific** audiences. See examples of Structured Technical Abstracts in Appendix B.

Organize the abstract into the following sections:

- Background and integration of the Sub-Award project into the CHERC
- Objective/Hypothesis
- Specific Aims
- Study Design

The abstract field is limited to 3,100 characters, including spaces, and will truncate after that point.

The American Cancer Society may share the structured technical abstract under a non-disclosure agreement with a third party. Therefore, do not include proprietary information. Please notify us if you do not wish to have your abstract utilized in this manner.

#### 3. STATEMENT OF CANCER RELEVANCE AND IMPACT

This section is important to the stakeholders (non-scientific members) on the peer review committees as well as to several general audiences, including donors. **Avoid the use of technical jargon.** 

Describe how the project contributes short- and long-term to the control of cancer. For basic studies relying on experimental models (rather than human cancer cells, tissues, or clinical data) explain how the successful completion of the proposed work will lead to a better understanding of the disease or improve our ability to prevent, detect, treat or manage cancer or cancer patients.

For studies involving human subjects, what do you expect to learn about how access to care impacts the overall cancer burden? How could your study improve both delivery of care and cancer outcomes? What effects do you anticipate on the morbidity, mortality, and/or quality of life of your study population? How might further investigations find potential value for health policy?

Limit the Cancer Relevancy Statement to 1500 characters, including spaces.

#### 4. VALIDATION OF APPLICATION MATERIALS AND SAVING

Once complete, validate the application in proposalCENTRAL. This will confirm that all application components have been uploaded.

After the validation step, save the completed application as a .pdf. The completed Sub-Award should then be uploaded in the Center application. **Do not** submit the Sub-Award application separately through proposalCENTRAL.

#### **RESEARCH SCHOLAR GRANT**

#### I. COVER PAGES

Complete all fields, which include mandatory e-signature for the PI. We provide text boxes for e-signatures for the departmental chair (or equivalent) and institutional officials to accommodate institution-specific requirements for proposal submissions, but neither is required for submission to ACS. Note: the PI must enable other users' access to the application on proposalCENTRAL to permit their e-signatures.

If you have received a letter from the ACS Eligibility Committee, upload the correspondence in the Appendix.

#### II. APPLICATION TEMPLATES

Once an application is started on proposalCENTRAL, all necessary application templates are available to download. Complete off-line (described in individual sections below) and upload as .pdf documents. All application materials for an individual Sub-Award need to be merged into a single .pdf and uploaded in the main CHERC application.

For assistance, see proposalCENTRAL's FAQ or call support at 1-800-875-2562.

# 1. TABLE OF CONTENTS (PAGE 1.1)

Complete the Table of Contents by indicating the appropriate page numbers for each section; limit the length of the Table of Contents to 2 pages.

# 2. BIOGRAPHICAL SKETCH OF APPLICANT (PAGE 2.1)

Complete the NIH Biosketch template, following the formats and instructions provided by the NIH. The Biographical Sketch may not exceed 5 pages.

#### 3. REPLY TO PREVIOUS REVIEW (PAGE 3.1)

For resubmissions, address the points raised in the previous critiques and direct the reviewer to the specific sections of the text, figures, or tables where edits have been made. Revisions should be easily identifiable in the revised application (e.g.: bold type, italicized, or underline type). This section should not exceed 3 pages.

# 4. PREVIOUS CRITIQUES (RESUBMISSIONS ONLY)

Include a copy of the reviewer's critiques with your resubmitted application. In proposalCENTRAL, go to the "Submitted" page, select "View Review Info," click "Print" to save it as a .pdf. Upload the document to your new application with the other proposal sections.

#### 5. RESEARCH PLAN AND ENVIRONMENT – CANCER HEALTH EQUITY (PAGE 4.1)

#### **Key Words and Definitions**

**ACS Cancer Health Equity Definition:** Cancer health equity involves everyone having the fair and just opportunity to prevent, detect, treat, and survive cancer. Health inequities and health disparities may be characterized by age, gender, disability status, ethnicity/race, nativity and immigration status, geography, income, language, social class and sexual orientation.

**Social Determinants of Health:** This refers to macro-environmental conditions where people are born, grow, live, work and age along with the available systems supporting health. Research may include aspects of the following domains of the social determinants of health inequities: economic; education; neighborhood and built environment; policy; social and community context; or factors impacting access to and provision of high-quality care.

Levels of Influence: individual, interpersonal, organizational, community, or public policy.

All cancer health equity applications must target two or more social determinants of health.

Section (A) below (Specific Aims) should not exceed 1 page. Sections (B) through (E) below must not exceed 12 pages. This page limit does not include Sections (F) through (I).

- A. Specific Aims. List the objectives and goal(s) of the research proposed and briefly describe the Specific Aims within the context of the social determinants of health your research will address to contribute to achieving health equity. In addition, briefly describe the connection of the Sub-Award project to the goals/aims of the Center.
- **B. Background and Significance.** Concisely summarize and critically evaluate related work pertaining to social determinants of health and cancer health equity topics that will be the focus of your research. State how successful completion of the proposed work will advance cancer health equity related to some aspect of the cancer control continuum: prevention, screening and early detection, diagnosis, treatment, palliative care or survivorship, and how the proposed work will advance the CHERC's goals.

### C. Innovation.

- 1. Explain how the application challenges and seeks to shift current social, political, research, or clinical practice paradigms in relation to health equity.
- 2. Describe any novel theoretical concepts, approaches or methodologies, technologies or intervention(s) to be developed or used, and any advantage over existing methodologies, or intervention(s)addressing cancer health equity.
- 3. Explain any refinements, improvements, or new applications of theoretical concepts, models, methodologies, technologies, or interventions.
- 4. If applicable, explain what is unique in your approach to address an important issue regarding the social determinants of health and cancer health equity. Describe how this innovation been enhanced by community, health systems or public policy partnerships.
- **D. Preliminary Studies.** Provide results of your prior research that are relevant to this proposal; reprints or preprints may be included in the Appendix. Note that the entire application is considered confidential, including reports of unpublished research.
- E. Research Design. Describe your overall hypothesis, proposed methods, procedures, and data analysis in enough detail to permit evaluation by other scientists; include your rationale for approaches and analysis. Explain your project's feasibility and how the experiments proposed will address the Specific Aims. All cancer health-equity applications must address two or more social determinants of health in relation to the following domains: economic; education; neighborhood and built environment; policy; social and community context; or factors impacting access to and provision of high-quality care.

For the CHERC RSG Sub-Award, applicants must propose multi-level health equity research and must also target two or more levels of influence (individual, interpersonal, organizational, community, or public policy) and focus on contributing to achieving health equity. Applicants are at liberty to use more than one model to describe the theoretical underpinning of their research approach. Discuss potential difficulties, pitfalls, and limitations of your proposed methods and provide alternative approaches. Inclusion of an experimental timeline can be helpful.

- **F.** Potential for Knowledge Transfer and Experimental Details (3 pages or less). Create a clearly defined plan of how the results of the study will be used to develop future research and how it will practically impact cancer health equity. Concisely describe how the findings will be disseminated. Describe potential application of study findings to the work of ACS.
  - In addition to the required Knowledge Transfer components above, additional space is available for more in-depth descriptions of the experimental design, technologies, or assays needed to convey the specific approaches and procedures proposed.
- G. Environment. Briefly describe the space and equipment available to carry out the proposed research (e.g., space designated specifically for your research program, shared space and/or core facilities). Investigators must have an institutional commitment of research facilities, and the amount of committed space must be verified (see Statement of Institutional Support in Section 12 below). This section is required and especially important for all non-tenure track applicants.
- H. Statement of Science Outreach and Advocacy (not to exceed 1 page). ACS considers it important that scientists communicate the results of their research to a wide range of communities. Explain the potential impact of your proposed project on your community, and to the ACS's mission to save lives, celebrate lives, and lead the fight for a world without cancer. Share any previous experiences in science outreach and advocacy. Describe your plans for disseminating your work in the cancer arena through advocacy, awareness, education, or service. Please include your plans for sharing your research and research findings with your (non-academic) community members and for engaging with community partners in the dissemination process.
- **I. References.** Each literature citation should include title, authors, book or journal, volume number, page numbers, and year of publication. There is no page limitation; this section is not included in the 12-page limit of sections (b) through (e).

#### 6. DETAILED BUDGET

Complete the budget page located online at proposalCENTRAL. The details provided in this budget template should match the comprehensive CHERC budget (with each item tagged to the respective Sub-Award PI) that is filled out in the budget section on proposalCENTRAL.

**A. Personnel.** Names and positions of all key personnel must be individually listed, and the percentage of time to be devoted to the project by each person should be entered. List all key personnel (defined as individuals who will participate actively in the design and/or execution of the studies) other than the PI. Details of contractual arrangements with key personnel should be provided in the Justification of Budget section.

If the individual has not been selected, please list as "vacancy." Personnel may receive salary support up to a maximum that equals the NIH salary cap, prorated according to their percent effort on the project. If a Key Person is not receiving salary, you can request \$0 for salary, but their percent effort is still required. Their effort and contribution to the project should be outlined in the Budget Justification even if they are not being compensated.

The costs to the institution of employee fringe benefits should be indicated as a percent of the employee's salary. The amount of fringe benefits requested must be prorated to the salary requested. For example, if 50 percent of an individual's annual salary is requested, then no more than 50 percent of that individual's annual cost for fringe benefits can be requested.

**Note:** The Society does not cover the costs of student tuition or fees for graduate or undergraduate students.

#### B. Equipment

- Permanent equipment. Defined as items of nonexpendable property with a purchase
  cost per unit that equals or exceeds \$5,000 with a useful life of more than one year. List
  separately and justify the need for each item of permanent equipment. Note: the cost of
  permanent equipment is not included in the direct cost total used to calculate indirect
  costs.
- Small or expendable equipment. Defined as expendable property with a purchase cost per unit that is less than \$5,000 and/or that has a short service life (<1 year). Note: Equipment that equals or exceeds \$5,000 with a useful life of more than one year, is not included in the direct cost total used to calculate indirect costs. the cost of small or expendable equipment should be included in the direct costs total used to calculate indirect costs.
- General purpose equipment. Equipment such as computers used primarily or
  exclusively in the actual conduct of the proposed scientific project are considered direct
  costs and may be included in the direct cost total used to calculate indirect costs.
  Computers or other general-purpose equipment that will be used on multiple projects or
  for personal use are not allowable expenditures.
- **C. Supplies.** Group supplies into major categories (e.g., glassware, chemicals, radioisotopes, survey materials, animals, etc.).
- D. Travel. Include travel funds for the PI to travel to national meetings and conferences to present their research, to stay abreast of scientific updates in their field, or for career development activities. The budget should also include at least \$1500 per year to attend ACS meetings/retreats. Domestic travel only; special consideration will be given for attendance at scientific meetings held in Canada.
- **E. Miscellaneous Expenditures.** List specific amounts for each item. Examples of allowed expenditures include publication costs and special fees (e.g., pathology, computer time and scientific software, and equipment maintenance).
- **F. Subcontracts.** If any portion of the proposed research is to be carried out at another institution, enter the total direct costs on the online budget detail page on proposalCENTRAL. Each subcontract should be listed separately. Then provide a

categorical breakdown of costs using the Subcontractor Budget and Justification form, using one form per subcontractor.

Subcontracts for the research project may be with public or private institutions, provided they do not violate ACS policies. Subcontracts involving a contractor residing outside the borders of the United States are not permitted, unless the applicant can document that it is not feasible to have the work performed within the United States.

Administrative pages: A Letter of Agreement between institutions pertaining to the subcontract should be included in the Appendix.

**G.** Indirect Costs. If the Sub-Award is at the CHERC institution, then enter \$0. An indirect cost allowance of up to 20% of the direct costs, excluding permanent equipment, can be included in the budget if the Sub-Award is at a non-CHERC institution.

**IDC in Subcontracts:** Indirect costs for a subcontract budget may be claimed by either the primary or the secondary institution, but not both. Indirect costs can be provided to the secondary institution through negotiation with the Principal Investigator's institution but the total amount of indirect costs, inclusive of subcontracts, may not exceed 20% of the award. If the secondary institution is claiming the indirect costs, then the direct costs for the subcontract must be subtracted from the total direct costs of the Center before calculating the indirect costs. If a subcontract is receiving indirect costs, list the indirect costs for each institution separately in the indirect costs section of the budget form.

**Note:** Applicants should not budget above or below the allowable indirect cost rate.

H. Total Amount Requested. Research Scholar Grant Sub-Awards proposed within a CHERC application may budget \$200,000 direct costs per year for a maximum duration of 4 years. If the Sub-Award is at an institution other than the CHERC institution, applicants can also request 20% indirect costs per year. The total budget may not exceed \$800,000 at the CHERC institution (or \$960,000 if at non-CHERC institution) for the project period.

The amount on the application title page should match the total costs in the detailed budget section.

#### 7. JUSTIFICATION OF BUDGET

Provide budget justification on the template. Justify all items of permanent equipment costing over \$5,000, as well as your needs for personnel, supplies, travel, and other miscellaneous items. If the budget includes a request for funds to be expended outside the United States or its territories, include an explanation of why such costs are essential for the successful conduct of the project, and why there are no alternatives.

Provide details of contractual arrangements with key personnel in this section.

# 8. BIOGRAPHICAL INFORMATION OF KEY PERSONNEL (PAGE 5.1)

Provide information for all key personnel involved in the project. Complete the NIH Biosketch template. NOTE: Follow the format and instructions provided by the NIH.

# 9. OTHER SUPPORT (PAGE 6.1)

The ACS does not fund projects that are supported all or in part by another agency. Projects are considered to overlap if there are any shared Specific Aims or areas of budgetary overlap. The ACS Scientific Director makes final decisions regarding any questions of overlap.

The only exceptions are:

- Funds provided by the institution as start-up support to develop a new laboratory or to gather pilot data; and
- Awards that provide only salary support for the PI. In the latter case, if the salary support
  for the PI's contribution to the project is covered by the other agency, no additional salary
  support for the PI may be requested from the ACS.

Provide the following information separately for the Sub-Award PI and all other Key Personnel:

- **A. Current Support.** List all current funding from intramural and extramural sources (e.g., institutional awards and grants from for-profit and not-for-profit agencies, including other grants from the ACS). Provide for each award:
  - a. Source of funds
  - b. Grant number
  - c. Project title
  - d. Inclusive dates of approved or proposed project. For example, in the case of NIH support, provide the dates of the approved or proposed competitive segment.
  - e. Total direct costs
  - f. Percent effort or person-months. For an active project, use person months, even if unsalaried for the current budget period. Classify person-months as academic, calendar, and/or summer.
  - g. An outline of the goals of the project in a brief paragraph.
  - h. A clear indication of overlap and differences between this grant and the proposed study. If necessary, include an explanatory letter in the Appendix.
- **B. Pending Support.** List all pending applications for funding from intramural and extramural sources (e.g., institutional awards and grants from for-profit and not-for-profit agencies, including other grants from the ACS).
  - a. Source of funds
  - b. Project title
  - c. Inclusive dates of approved or proposed project. For example, in the case of NIH support, provide the dates of the approved or proposed competitive segment.
  - d. Total direct costs
  - e. Percent effort or person-months. For an active project, use person months, even if unsalaried, for the current budget period. Classify person-months as academic, calendar, and/or summer.
  - f. An outline of the goals of the project in a brief paragraph.
  - g. A clear indication of overlap and differences between this grant and the proposed study. If necessary, include an explanatory letter in the Appendix. In such cases, you may accept only one award if both are approved for funding. The ACS does not negotiate partial funding of grants with overlapping specific aims.

Please notify the Scientific Director if a pending extramural grant is funded during the peer review process since this could affect the feasibility of the Pl's proposed effort (for cases of no scientific overlap) and possibly eligibility (for cases of scientific overlap).

#### **C. Institutional Support.** Provide the following information for the Sub-Award PI only:

- a. For early-stage investigators, a description of any start-up funds provided by the institution to the applicant. An award of start-up funds does not decrease the likelihood of ACS support and can be important evidence of institutional commitment.
- b. Details of the institutional commitment to support the applicant's salary.
- c. The current term of the applicant's appointment.

Non-tenure track applicants should also include a more detailed description of the space committed to the project. If the applicant is in the same department as a previous mentor, provide information on the relationship between the mentor's research space, and the space available for the project, and the relationship between funded research projects in the mentor's laboratory and the present application. Documentation should be included in the Statement of Institutional Support (Section 12, below) written by the Department Chair.

# 10. LIST OF LETTERS OF SUPPORT FROM COLLABORATORS/CONSULTANTS (PAGE 7.1)

Provide a list of collaborators and consultants. Place the letter from each individual collaborator or consultant after Page 7.1. The letter should outline the role that person will play with sufficient detail for evaluation of the value of the individual contribution.

# 11. COMPLIANCE STATEMENTS (PAGES 8.1 – 8.3)

#### **Human Subjects**

**Selection of study population.** When conducting research on humans, provide the rationale for selecting your target population. Include the involvement of children, minorities, and especially vulnerable populations such as neonates, pregnant women, prisoners, institutionalized individuals, or others who may be considered vulnerable populations or others who may be considered vulnerable populations. The institution is required to ensure IRB approval is obtained for the grant to start, and the approval documentation is uploaded into proposalCENTRAL within 3 months of grant activation (if the grant is funded).

On the planned enrollment form, estimate the total number of subjects by primary ethnicity and race, race/ethnicity subgroup (if applicable), and gender. Include a rationale for excluding any population. Estimate the planned enrollment based on these calculations.

Also include estimates of the sample distribution by gender, race, and ethnicity (if available). For example, if your sample size is 200, to complete the total number of subjects column by race (based on what you know about the population demographics or the existing dataset you plan to analyze), multiply by the estimated percentage.

Estimated percentage of the population by race	Estimated total number of subjects
50% White	100 (200 x 0.50)
49% AA	98 (200 x 0.49)
1% Asian	2 (200 x 0.01)

For applicants performing research with non-human subjects, check the box that most appropriately describes your research.

**Potential benefits, risks, and knowledge gained.** Succinctly describe the potential benefits and risks to subjects (physical, psychological, financial, legal, or other). Explain why the risks are reasonable in relation to the anticipated benefits, both to research participants and others. Where appropriate, describe alternative treatments and procedures, including the risks and potential benefits to participants.

Research specimens and data. If the proposed research involves biospecimens, explain how the research material will be obtained from living subjects and what materials will be collected. List any specific non-biological data, such as demographic information, and how it will be collected, managed, and protected. Specify who will have access to such data and what measures you will maintain to keep personally identifiable private information confidential.

**Collaborating sites.** Where appropriate, list any collaborating sites where research on human subjects will be performed and describe the role of those sites and collaborating investigators in performing the proposed research. Explain how data from the site(s) will be obtained, managed, and protected.

**Note:** See the Department of Health and Human Services Office of Research Protection Subparts B-D for additional protections for vulnerable populations.

http://www.hhs.gov/ohrp/policy/populations/index.html.

#### **Vertebrate Animals**

IACUC approval must be obtained before animal work begins. An IACUC approval letter must be uploaded to proposalCENTRAL immediately upon approval.

Provide your rationale for using live vertebrate animals including the:

- Necessity for using the animals and species proposed;
- Appropriateness of the strains, ages, genders of the animals to be used;
- Justifications for, and appropriateness of, the numbers of animals proposed. When completing the Targeted Enrollment Table, select non-human subjects research and check the box that most appropriately describes your research.

#### **Biohazards**

Briefly describe whether any materials or procedures proposed are potentially hazardous to research personnel, equipment, and/or the environment. What protections will mitigate such risks? Include biological and chemical hazards, if applicable.

# <u>Authentication of Key Biological and/or Chemical Resources</u>

Briefly describe methods to ensure the identity and validity of key biological and/or chemical resources to be used in the proposed studies. These resources may or may not be generated with ACS funds and:

- may differ from laboratory to laboratory or over time;
- may have qualities and/or qualifications that could influence the research data; and
- must be integral to the proposed research.

These may include, but are not limited to, cell lines, specialty chemicals, antibodies, and other biologics. Researchers should transparently report how they have authenticated key resources, so consensus can emerge.

Standard laboratory reagents that are not expected to vary do not need to be included in the plan (e.g., buffers and other common biologicals or chemicals). After reviewers assess the information you provide in this Section, their questions will need to be addressed prior to an award.

In this section, focus only on authentication and/or validation of key resources to be used in the study. Include all other information within the page limits of the research strategy. Applications that fail to comply may be dismissed.

# **Cancer Health-Equity Statement (750-words)**

Applicants proposing health-equity research must upload a Cancer Health Equity Statement (Page 8.3). In it, summarize the targeted area(s) of health equity, study population, and how the proposed research can contribute to improving health equity relevant to cancer.

How will your anticipated findings advance the field? This must pertain to an aspect of the cancer continuum and one or more of the social determinants of health. Examples of research in this area include, but are not limited to, improvements in:

- risk reduction behaviors:
- access to cancer prevention;
- early detection, diagnosis, and/or treatment services;
- reducing cancer morbidity, mortality, symptom burden, or costs; and
- quality of care, quality of life, or health policy impact.

#### 12. STATEMENT OF INSTITUTIONAL SUPPORT (PAGE 9.1)

The Department Chair (or equivalent) should provide the following information and any pertinent supporting documentation for the Sub-Award Principal Investigator only:

- A description of any start-up funds provided by the institution to the applicant. An award
  of start-up funds does not decrease the likelihood of ACS support, and can be important
  evidence of institutional commitment.
- Details of the institutional commitment to support the applicant's salary and research program.
- The current term of the applicant's appointment.
- For non-tenure track applicants, additional descriptions of the space and resources committed to the project should be highlighted.

If the applicant is in the same department as a previous mentor, provide information on the relationship between the mentor's research space, and the space available for the project, and the relationship between funded research projects in the mentor's laboratory and the present application.

#### 13. APPENDIX TO THE APPLICATION

In addition to the application templates, other key documents may be uploaded and submitted as part of the application. However, applicants are urged to keep this section as brief as possible. Appended materials may include:

- Letter from ACS Eligibility Committee confirming eligibility (if applicable)
- Recent reprints or preprints (optional)
- Clinical protocols (if applicable)
- Logic model for program projects and dissemination and implementation pilots (if applicable)

#### **CLINICIAN SCIENTIST DEVELOPMENT GRANT**

#### I. COVER PAGES

Complete all fields, which include mandatory e-signature for the principal investigator. We provide text boxes for e-signatures for the departmental chair (or equivalent) and institutional officials to accommodate institution-specific requirements for proposal submissions, but neither is required for submission to ACS. Note: the PI must enable other users' access to the application on proposalCENTRAL to permit their e-signatures.

If you have received a letter from the ACS Eligibility Committee, upload the correspondence in the Appendix.

#### II. APPLICATION TEMPLATES

Once an application is started on proposalCENTRAL, all necessary application templates are available to download. Complete off-line (described in individual sections below) and upload as .pdf documents. All application materials for an individual Sub-Award need to be merged into a single .pdf and uploaded in the main CHERC application.

For assistance, see proposalCENTRAL's FAQ or call support at 1-800-875-2562.

# 1. TABLE OF CONTENTS (PAGE 1.1)

Complete the Table of Contents by indicating the appropriate page numbers for each section. Note: limit the length to 2 pages.

### 2. STATEMENT OF EXPERIENCE AND CAREER GOALS OF THE APPLICANT (PAGE 2.1)

In 3 pages or less, describe:

- a. Clinical and research experiences that have been impactful and why. For all research
  experience, state the nature, results, location, time frame, with whom the work was
  conducted, and your role;
- b. The training potential of the grant; include new technical and conceptual approaches the training will offer;
- c. Short- and long-term career goals in cancer research and how the proposed training and research plans align with these goals.

### 3. BIOSKETCH OF THE APPLICANT (PAGE 3.1)

Complete the NIH Biosketch template, following the format and instructions provided by the NIH. In addition, please provide all post-doctoral research experience in the Mentored Training section. Note: The Biographical Sketch may not exceed 5 pages.

# 4. LIST OF RECOMMENDERS (PAGE 4.1)

List the name, title, and email address of three persons, other than your proposed mentor(s), who can critically appraise your qualifications. This contact information must also be provided in the Center application on proposalCENTRAL so that the letter writers can access the site to upload their letters. The Center PI will need to enter the contact information for the recommenders. Instruct the letter writers to include the CSDG candidate's name in the title of the letter.

They should be able to comment on your character, motivation, maturity, general knowledge, ability to use research techniques, originality, specialized experience, and training.

There are specific instructions on the site for you/the Center PI and your recommenders. The letters are required for your application to be considered at peer review.

Please Note for Resubmissions Only: Letters of recommendation can be reused, but recommenders are required to upload the letters to proposalCENTRAL again.

#### 5. REPLY TO PREVIOUS REVIEW (PAGE 5.1)

For resubmissions, address the points raised in the previous critiques and direct the reviewer to the specific sections of the text, figures, or tables where edits have been made. Revisions should be easily identifiable in the revised application (e.g.: bold type, italicized, or underline type). This section should not exceed 3 pages.

# 6. PREVIOUS CRITIQUES (RESUBMISISONS ONLY)

Include a copy of the reviewer's critiques with your resubmitted application. In proposalCENTRAL, go to the "Submitted" page, select "View Review Info," click "Print" to save it as a .pdf. Upload the document to your new application with the other proposal sections.

### 7. RESEARCH PLAN AND ENVIRONMENT - CANCER HEALTH EQUITY (PAGE 6.1)

## **Definitions and Key Words**

**ACS Cancer Health Equity Definition:** Cancer health equity involves everyone having a fair and just opportunity to prevent, detect, treat, and survive cancer. Health inequities and health disparities may be characterized by age, gender, disability status, ethnicity/race, nativity and immigration status, geography, income, language, social class and sexual orientation.

**Social Determinants of Health:** This refers to macro-environmental conditions where people are born, grow, live, work, and age along with the available systems supporting health. Research may include aspects of the following domains of the social determinants of health inequities: economic; education; neighborhood and built environment; policy; social and community context; or factors impacting access to and provision of high-quality care.

Levels of Influence: individual, interpersonal, organizational, community, or public policy.

All cancer health equity applications must target two or more social determinants of health.

Section (A) below (Specific Aims) should not exceed 1 page. Sections (B) through (E) must not exceed 12 pages. This page limit does not include Sections (F) through (I).

- **A. Specific Aims** (not to exceed 1 page). List the objectives and goal(s) of the research proposed. Briefly describe the Specific Aims in the context of two or more of the social determinants of health for which your proposed research will contribute to achieving health equity. In addition, briefly describe the connection of the Sub-Award project to the goals/aims of the Center.
- **B.** Background and Significance. Concisely summarize and critically evaluate work pertaining to social determinants of health and cancer health equity topics, which will be the focus of your research. State how successful completion of the proposed work will advance

cancer health equity related to some aspect of the cancer control continuum: prevention, screening and early detection, diagnosis, treatment, palliative care, or survivorship, and how the proposed work will advance the CHERC's goals.

#### C. Innovation.

- 1. If applicable, explain how the application challenges and seeks to shift current social, political, research, or clinical practice paradigms in relation to health equity.
- 2. Describe any novel theoretical concepts, approaches, methodologies, technologies, or intervention(s) to be developed or used, and any advantage over existing methodologies, or intervention(s) addressing cancer health equity.
- **3.** Explain any refinements, improvements, or new applications of theoretical concepts, models, methodologies, technologies, or interventions.
- **4.** If applicable, explain what is unique in your approach to address an important issue regarding the social determinants of health and cancer health equity. Describe how this innovation may be enhanced by community, health systems, or public policy partnerships.
- **D. Preliminary Studies.** Provide results of your prior research that are relevant to this proposal; reprints or preprints may be included in the Appendix. Note that the entire application is considered confidential, including reports of unpublished research.
- E. Research Design. Describe your overall hypothesis, proposed methods, procedures, and plan for data collection and analysis in enough detail to permit evaluation by other scientists; include your rationale for approaches and analysis. Explain your project's feasibility and how the strategies proposed will address the Specific Aims. Discuss potential difficulties, pitfalls, and limitations of your proposed methods and provide alternative approaches. Inclusion of an experimental time-line can be helpful.
  - All cancer health equity applications must address two or more social determinants of health in relation to the following domains: economic; education; neighborhood and built environment; policy; social and community context; or factors impacting access to and provision of high-quality care.
- **F.** Potential for Knowledge Transfer and Experimental Details (3 pages or less). Create a clearly defined plan of how the results of the study will be used to develop future research and how it will practically impact cancer health equity. Concisely describe how the findings will be disseminated. Describe potential application of study findings to the work of ACS.
  - In addition to the required Knowledge Transfer components above, this section is also available if more in-depth descriptions of the study design, technologies, or other aspects needed to convey the specific approaches and procedures proposed.
- **G.** Environment for Research and Training. Document the existence of an appropriate academic and research environment for the proposed research study and training program, including:
  - departmental and other institutional personnel,
  - ongoing research and other relevant activities,

- facilities and resources.
- access to any populations or individuals to be studied,
- · relevant collaborative relationships, and
- any relevant accreditation from professional societies or organizations.

Describe how the presence of these resources will directly benefit you and your research.

- H. Statement of Science Outreach and Advocacy (not to exceed 1 page). ACS considers it important that scientists communicate the results of their research to a wide range of communities. Explain the potential impact of your proposed project on your community, and to the American Cancer Society's mission to save lives, celebrate lives, and lead the fight for a world without cancer. Share any previous experiences in science outreach and advocacy. Describe your plans for disseminating your work in the cancer arena through advocacy, awareness, education, or service. Please include your plans for sharing your research and research findings with your (non-academic) community members and for engaging with community partners in the dissemination process.
- **I.** References (*no page limit*). Each literature citation should include the title, authors, book or journal, volume number, page numbers, and year of publication. This section is not included in the 12-page limit of Sections (b) through (e).

#### 8. DETAILED BUDGET

Complete the budget page located online at proposalCENTRAL. The details provided in the budget template should match the comprehensive CHERC budget (with each item tagged to the respective Sub-Award PI) that is filled out in the budget section on proposalCENTRAL.

A. Personnel. Names and positions of all Key Personnel must be individually listed, and the percentage of time to be devoted to the project by each person noted. List all Key Personnel other than the PI (defined as individuals who will participate actively in the design and/or execution of the studies). Details of contractual arrangements with Key Personnel should be provided in the Justification of Budget section. If a Key Person is not receiving salary, you can request \$0 for salary, but their percent effort is still required. Their effort and contribution to the project should be outlined in the Budget Justification even if they are not being compensated.

If the individual has not been selected, please list as "vacancy." Personnel may receive salary support up to a maximum that equals the NIH salary cap, prorated according to their percent effort on the project.

For each study team member, indicate the proposed percent effort and the salary and fringe benefits for which the total requested salary is based. The costs to the institution of employee fringe benefits should be indicated as a percent of the employee's salary. The amount of fringe benefits requested must be prorated to the salary requested. For example, if 50 percent of an individual's annual salary is requested, then no more than 50 percent of that individual's annual cost for fringe benefits can be requested.

**Mentor(s).** List all mentor(s), defined as those individuals who will provide guidance, support and mentoring to you on this award; \$10,000 per year is the maximum allowable for mentor(s), regardless of the number of mentors on the application.

# **B.** Equipment

- Permanent equipment. Defined as items of nonexpendable property with a purchase
  cost per unit that equals or exceeds \$5,000 with a useful life of more than one year. List
  separately and justify the need for each item of permanent equipment. Note: the cost of
  permanent equipment is not included in the direct cost total used to calculate indirect
  costs.
- Small or expendable equipment. Defined as expendable property with a purchase cost
  per unit that is less than \$5,000 and/or has a short service life (<1 year). Note: the cost
  of small or expendable equipment may be included in the direct cost total used to
  calculate Indirect costs.</li>
- General purpose equipment. Equipment such as computers or laptops used primarily
  or exclusively in the actual conduct of the proposed scientific project are considered
  direct cost and may be included in the direct cost total used to calculate indirect costs.
  Computers or other general-purpose equipment that will be used on multiple projects or
  for personal use are not allowable expenditures.
- **C. Supplies.** Group into major categories (e.g., glassware, chemicals, radioisotopes, survey materials, animals).
- D. Travel. Include travel funds for the PI to travel to national meetings and conferences to present their research, to stay abreast of scientific updates in their field, or for career development activities. The budget should also include at least \$1500 per year to attend ACS meetings/retreats. Domestic travel only; special consideration will be given for attendance at scientific meetings held in Canada.
- **E. Miscellaneous Expenditures.** List specific amounts for each item. Examples of allowed expenditures include publication costs and special fees (e.g., pathology, computer time, scientific software, and equipment maintenance).
- **F. Subcontracts.** If any portion of the proposed research is to be carried out at another institution, enter the total direct costs on the online budget detail page on proposalCENTRAL. Each subcontract should be listed separately. Then provide a categorical breakdown of costs using the Subcontractor Budget and Justification form, using one form per subcontractor. Upload the form(s) when complete, entering the subcontractor's name in the "describe attachment" field.

Subcontracts for the research project may be with public or private institutions, provided they do not violate ACS policies. Subcontracts involving a contractor residing outside the borders of the United States are not permitted, unless the applicant can document that it is not feasible to have the work performed within the United States.

**Administrative pages:** A Letter of Agreement between institutions pertaining to the subcontract should be included in the Appendix.

**G. Indirect Costs (IDC).** If the Sub-Award is at the CHERC institution, then enter \$0. An indirect cost allowance of up to 8% of the direct costs, excluding permanent equipment, can be included in the budget if the Sub-Award is at a non-CHERC institution. If indirect costs will be claimed by any secondary institution(s), then the direct costs of that Sub-Award or

subcontract must not be included in the total direct costs of the primary institution used to calculate the indirect cost total.

**IDC in Subcontracts:** Indirect costs for a subcontract can be provided to the secondary institution through negotiation with the Principal Investigator's institution but the total amount of indirect costs, inclusive of subcontracts, may not exceed 8% of the award. If a subcontract is receiving indirect costs, list the indirect costs for each institution separately in the indirect costs section of the budget form.

**Note:** Applicants should not budget above or below the allowable indirect cost rate.

H. Total Amount Requested. Budget totals should reflect a duration of 3-4 years, depending on applicant eligibility. The allowable per year direct cost is \$135,000 per year (CHERC institution) or \$145,800 (non-CHERC institution) with an 8% indirect costs rate. The amount on the application title page should match the total costs in the detailed budget section.

#### 9. JUSTIFICATION OF BUDGET

Provide budget justification on the template provided for each item listed in the budget. This includes all permanent equipment costing over \$5,000, personnel, supplies, travel, and other miscellaneous items. If the budget includes a request for funds to be expended outside the United States or its territories, this section should include an explanation of why such costs are essential for the successful conduct for this project, and why there are no alternatives. Provide details of contractual arrangements with key personnel in this section.

**Additional Mentors:** If there is more than one mentor on the application, clearly specify the role of each mentor, even if there is no associated cost.

### 10. BIOGRAPHICAL SKETCHES OF KEY PERSONNEL (PAGE 7.1)

Complete the NIH Biosketch template. Note: Follow the format and instructions provided by the NIH. This is a required field. Therefore, if no Key Personnel are included, a blank form must be uploaded. Do not include the Mentor's Biosketch in this section.

#### 11. OTHER SUPPORT (PAGE 8.1)

The ACS does not fund projects that are supported all or in part by another agency. Projects are considered to overlap if there are any shared Specific Aims or areas of budgetary overlap. Scientific Directors make final decisions regarding any questions of overlap.

The only exceptions are:

- Funds provided by the institution as start-up support to develop a new laboratory or to gather pilot data; and
- Awards that provide only salary support for the Principal Investigator. In the latter case, if
  the salary support for the PI's contribution to the project is covered by the other agency,
  no additional salary support for the PI may be requested from the American Cancer
  Society.

Provide the following information separately for the PI and all other Key Personnel:

- **A. Current Support.** List all current funding from intramural and extramural sources (e.g., institutional awards and grants from for-profit and not-for-profit agencies, including other grants from the ACS). Provide for each award:
  - a. Source of funds
  - b. Grant number
  - c. Project title
  - d. Inclusive dates of approved or proposed project. For example, in the case of NIH support, provide the dates of the approved or proposed competitive segment.
  - e. Total direct costs
  - f. Percent effort or person-months. For an active project, use person months, even if unsalaried, for the current budget period. Classify person-months as academic, calendar, and/or summer.
  - g. An outline of the goals of the project in a brief paragraph.
  - h. A clear indication of overlap and differences between this grant and the proposed study. If necessary, include an explanatory letter in the Appendix.
- **B. Pending Support.** List all pending applications for funding from intramural and extramural sources (e.g., institutional awards and grants from for-profit and not-for-profit agencies, including other grants from the ACS).
  - a. Source of funds
  - b. Project title
  - c. Inclusive dates of approved or proposed project. For example, in the case of NIH support, provide the dates of the approved or proposed competitive segment.
  - d. Total direct costs
  - e. Percent effort or person-months. For an active project, use person months, even if unsalaried, for the current budget period. Classify person-months as academic, calendar, and/or summer.
  - f. An outline of the goals of the project in a brief paragraph.
  - g. A clear indication of overlap and differences between this grant and the proposed study. If necessary, include an explanatory letter in the Appendix. In such cases, you may accept only one award if both are approved for funding. The ACS does not negotiate partial funding of grants with overlapping specific aims.

Please notify the Scientific Director if a pending extramural grant is funded during the peer review process since this could affect the PI's budgeted effort (for cases of no scientific overlap) or could compromise eligibility (for cases of scientific overlap, an NIH K-award, or an R01/R01-equivalent).

- **C. Institutional Support.** Provide the following information for the PI only:
  - a. Details of the institutional commitment to support the applicant including protected time, salary support and other financial resources, administrative support and available space.
  - b. The current term of the applicant's appointment.
  - c. Describe resources available to support the successful research career development of the applicant.

Documentation should be included in the Faculty or Specific Appointment of Candidate (Section 12, below) written by the Department Chair. There is no requirement that the PI have start-up funds or independent laboratory space.

# 12. FACULTY OR SCIENTIFIC APPOINTMENT (OF CANDIDATE) (PAGE 9.1)

A letter from the Department Chair (or equivalent) must be included in the application (upload in this section). This letter should clearly indicate the commitment of the institution to the support of the applicant and developing their research program. Details should include, but are not limited to, faculty rank, salary support, available space for the research proposal, the amount of protected time for clinical researchers, administrative support, core facilities, institutional faculty development, research training, resources to support coursework or travel, or other resources to foster the successful career development of the applicant. The letter should also describe the Department's long-term goals for the applicant's career.

#### Sections 13-16 must be prepared by the *primary mentor*.

## 13. PROGRAM GOALS AND PROPOSED TRAINING (PAGE 10.1)

Describe the overall goals of the proposed program and indicate how the grant, if awarded, will advance the candidate's career as an independent researcher. Provide a description of the specific plans for research training, including core curriculum studies, courses and lectures. For each mentor, describe their role, area of expertise, and the frequency and mode of contact with the Candidate should be provided. Explain in detail the activities planned for the period of the award, including clinical, research, teaching, coursework, administrative duties, etc., and skills the candidate will gain from the mentoring experience. Estimate the percentage of time allocated to each area. The primary mentor is expected to compose the mentoring and training plan. If an additional mentor is involved in the candidate's training, describe this person's participation as well. Include a table indicating the timeline of implementation and completion of the Training Plan. Limit this section to 5 pages.

### 14. TRAINING EXPERIENCE OF MENTOR(S) (PAGE 11.1)

Document your background and experience in training clinical and applied cancer researchers. Describe in detail (table format preferred) your mentoring experience (e.g., list the researchers you have trained, the extent of their training, and their current involvement in clinical or applied cancer research). Fully describe your current professional responsibilities and activities.

#### 15. BIOGRAPHICAL SKETCH OF MENTOR(S) (PAGE 12.1)

Provide biographical information requested for all mentors. Complete the NIH Biosketch template. Follow the format and instructions provided by the NIH. Use a separate "Biographical Sketch" template for each mentor. Note: The Biographical Sketch may not exceed 5 pages.

#### 16. MENTOR(S) COMMITMENT LETTER(S) (PAGE 13.1)

A letter of commitment must be provided from each mentor. The letter should include assessment of the Candidate's research ability and potential, motivation, ability to plan and conduct research, knowledge of the field of study, and ability to work as a member of a research team. Letters may also include other attributes of the Candidate such as character or motivation. The letters will need to be uploaded as an attachment to your application.

# 17. COMPLIANCE STATEMENTS (PAGE 14.1)

# See Research Scholar Grant Application Instructions above

#### 18. APPENDIX TO APPLICATION

In addition to the application templates, other key documents may be uploaded and submitted as part of the application. However, applicants are urged to keep this section as brief as possible.

Appended materials may include:

- Letters of support from Collaborators or Consultants detailing their role in the project
- Recent reprints or preprints (optional)
- Clinical Protocols (if applicable)
- Logic Model (for program projects and dissemination and implementation pilots if applicable)

It is not necessary to number the pages of the Appendix, but please list by categories (e.g., reprints, preprints) in the Table of Contents.

#### POSTDOCTORAL FELLOWSHIPS

#### I. COVER PAGES

Complete all fields, which include mandatory e-signature for the principal investigator. We provide text boxes for e-signatures for the departmental chair (or equivalent) and institutional officials to accommodate institution-specific requirements for proposal submissions, but neither is required for submission to ACS. Note: the PI must enable other users' access to the application on proposalCENTRAL to permit their e-signatures.

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Once an application is started on proposalCENTRAL, all necessary application templates are available to download. Complete off-line (described in individual sections below) and upload as .pdf documents. All application materials for an individual Sub-Award need to be merged into a single .pdf and uploaded in the main CHERC application.

For assistance, see proposalCENTRAL's FAQ or call support at 1-800-875-2562.

# 1. TABLE OF CONTENTS (PAGE 1.1)

Indicate the appropriate page number for the start of each section. At the bottom of the template, list the documents in the Appendix. Section must not exceed 2 pages.

#### 2. BUDGET

Please complete the online budget on proposalCENTRAL. Stipends for Postdoctoral Fellowships are \$66,000, \$68,000, and \$70,000 for the first, second, and third years, respectively. Fellows eligible for only two years may request progressive stipends of \$68,000 and \$70,000, respectively.

Each fellow will receive a yearly allowance of \$4,000 to be used to benefit the fellow (i.e., health insurance, workshop costs, career development activities, expenses associated with presenting at a scientific meeting(s), etc.). Use of the annual allowance to attend a scientific conference or meeting, but not present, are limited to \$1,500 per year. In the last year of funding, a \$1,500 travel allowance is to be prioritized for travel costs to attend and present at the biennial ACS Jiler Professors and Fellows Conference, if offered that year, or expenses to present at a domestic scientific meeting of choice. Institutional indirect costs may not be recovered from these funds (if at non-CHERC institution). No allowance funds may be used for any international activities.

#### 3. PENDING FELLOWSHIP APPLICATIONS (PAGE 2.1)

List all sources of current and pending fellowship support with other funding agencies. Indicate the granting agency, start date, and full term of the award. Please notify the Scientific Director immediately if you accept an award from another agency.

### 4. BIOGRAPHICAL SKETCH OF APPLICANT (PAGE 3.1)

Complete the NIH Biosketch template, following the format and instructions provided by the NIH. In addition, please provide all post-doctoral research experience in the Mentored Training section. Note: The Biographical Sketch may not exceed 5 pages.

#### 5. REPLY TO PREVIOUS REVIEW (PAGE 4.1)

For resubmissions, address the points raised in the previous critiques and direct the reviewer to the specific sections of the text, figures, or tables where edits have been made. Revisions should be easily identifiable in the revised application (e.g., bold type, italicized, or underline type). This section should not exceed 3 pages.

#### 6. PREVIOUS CRITIQUES (RESUBMISSIONS ONLY)

Include a copy of the reviewer's critiques with your resubmitted application. In proposalCENTRAL, go to the "Submitted" page, select "View Review Info," click "Print" to save it as a .pdf. Upload the document to your new application with the other proposal sections.

# 7. STATEMENT OF EXPERIENCE, TRAINING POTENTIAL OF THIS FELLOWSHIP, AND CAREER GOALS OF APPLICANT (PAGE 5.1)

In 3 pages or less, describe:

- a. Research experiences that have been impactful and why.
- b. The training potential of the fellowship beyond graduate work. Include new technical and conceptual approaches the training will offer.
- c. Career goals in cancer research and how the proposed training and research plans align with these goals.

# 8. RESEARCH PLAN - CANCER HEALTH EQUITY (PAGE 6.1)

#### **Key Words and Definitions**

**ACS Cancer Health Equity Definition.** Cancer health equity involves everyone having the fair and just opportunity to prevent, detect, treat, and survive cancer. Health inequities and health disparities may be characterized by age, gender, disability status, ethnicity/race, nativity and immigration status, geography, income, language, social class and sexual orientation.

**Social Determinants of Health.** This refers to macro-environmental conditions where people are born, grow, live, work and age along with the available systems supporting health. Research may include aspects of the following domains of the social determinants of health inequities: economic; education; neighborhood and built environment; policy; social and community context; or factors impacting access to and provision of high-quality care.

# All cancer health equity applications must target two or more social determinants of health.

The total length of this section should not exceed 9 pages, excluding references. Proposals should be realistic in terms of work to be accomplished in the time period for which support is requested.

**A. Specific Aims** (*limit to 1 page*). List the objectives and goal(s) of the research proposed and briefly describe the Specific Aims within the context of the social determinants of health your research will address to contribute to achieving health equity. In addition, briefly describe the connection of the Sub-Award project to the goals/aims of the Center.

- **B. Background and Significance.** Concisely summarize and critically evaluate related work pertaining to social determinants of health and cancer health equity topics, which will be the focus of your research. State how successful completion of the proposed work will advance cancer health equity related to an aspect of the cancer control continuum: prevention, screening and early detection, diagnosis, treatment, palliative care, or survivorship, and how the proposed work will advance the CHERC's goals.
- C. Preliminary Studies (if available; not required). Provide results of your prior research that are relevant to this proposal; reprints or preprints may be included in the Appendix. Note that the entire application is considered confidential, including reports of unpublished research.
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  - Discuss potential difficulties, pitfalls, and limitations of the methods and procedures and provide alternative approaches.
- **E. References.** Listed numerically, in order of their appearance in the text. Each reference listed must include the title, names of all authors, book or journal, volume number, page numbers, and year of publication. The page limit does not include references.

#### 9. STATEMENT OF SCIENCE OUTREACH AND ADVOCACY (PAGE 7.1)

ACS considers it important that scientists communicate the results of their research to a wide range of communities. Explain the potential impact of your proposed project on your community, and to the ACS's mission to save lives, celebrate lives, and lead the fight for a world without cancer. Share any previous experiences in science outreach and advocacy. Describe your plans for disseminating your work in the cancer arena through advocacy, awareness, education, or service. Please include your plans for sharing your research and research findings with your (non-academic) community members and for engaging with community partners in the dissemination process.

#### 10. LETTERS OF RECOMMENDATION (8.1)

In the Letter of Recommendation section, list the name, title, and email addresses of three individuals, other than the designated mentor(s) on this application, who can critically appraise your qualifications. This contact information must also be provided in the Center application on proposalCENTRAL so that the letter writers can access the site to upload their letters. The Center PI will need to enter the contact information for the recommenders. Instruct the letter writers to include the PF candidate's name in the title of the letter. There are specific instructions on the site for applicants/the Center PI and designated recommenders.

Ideally, letters will be provided by a graduate mentor, a member of a former dissertation committee, and a former research mentor. The letters should address character, motivation, maturity, general knowledge, ability to use research techniques, originality, specialized experience, and training.

The application is not considered complete until these letters have been provided on proposalCENTRAL.

**For Resubmissions Only:** Letters of recommendation can be reused if the application is resubmitted within a calendar year of the initial proposal. In order to resubmit your application, your recommenders must upload the letters on proposalCENTRAL again.

#### Sections 11-14 must be prepared by the primary mentor.

#### 11. PROPOSED TRAINING AND MENTORING (PAGE 9.1)

This plan is to be completed by the primary mentor. If there are co-mentors (or a mentoring team), only the primary mentor should complete the Training and Mentoring Plan. All mentors must submit the Biographical Information requested in Section 13.

In 3 pages or less, describe the training and mentoring plan proposed for the applicant covering the full period of training requested, including all phases of training, research and didactic. Describe how this plan is tailored for the applicant.

This information will be used to evaluate the quality of the training experience and is an integral part of the overall assessment of the application. To aid in this evaluation, consider including the following information:

- The numbers of Postdoctoral Fellows and Graduate Students in the laboratory, and, if applicable, indicate approximately how many graduate students and fellows have completed their training in the mentor's laboratory during the past 3-5 years, and where they have landed in their careers.
- The importance of the proposed research to cancer.
- Whether the proposed research plan was prepared independently by the applicant or in collaboration with you.

Any comments about the postdoctoral applicant should be included here rather than in a separate letter. The Primary Mentor should explain the roles of the Co-Mentor(s) in the training plan. The Co-Mentors can provide a separate letter of support, which can be placed in the Appendix.

#### 12. FACILITIES AVAILABLE (PAGE 10.1)

In 3 pages or less, describe the facilities available for the training program proposed.

### 13. BIOGRAPHICAL SKETCH OF MENTOR(S) (PAGE 11.1)

All mentors must complete the NIH Biosketch template, following the formats and instructions provided by the NIH. The Biographical Sketch may not exceed 5 pages

#### 14. RESEARCH SUPPORT OF MENTOR (PAGE 12.1)

List all active and pending grant support including granting agency, title of project, direct costs (clearly indicate whether the amount reflects per year or total), and term.

#### 15. COMPLIANCE STATEMENTS (PAGE 13.1)

See Research Scholar Grant Sub-Award Instructions above

#### 16. APPENDIX TO APPLICATION

In addition to the application templates, other key documents may be uploaded and submitted as part of the application. However, applicants are encouraged to include only highly relevant supporting documents. Appended materials may include:

- A letter from the Eligibility Committee
- Recent reprints or preprints (optional)
- Clinical protocols, if applicable
- Logic model, if applicable

It is not necessary to number the pages of the Appendix, but list in order by categories, (i.e., reprints, preprints, etc.), at the bottom of the Table of Contents.

#### **EVALUATION OF CHERC APPLICATIONS**

#### A. Assessment of CHERC

What are the goals of the CHERC? What cancer health equity(ies) are they addressing? Are they addressing at least 2 or more social determinants of health? Are the proposed Sub-Award projects aligned with the stated goals of the Center? Are there limitations or needs at the CHERC institution and have these been sufficiently addressed? Will the CHERC institution leverage unique assets or partners in their community, such as local or regional institutions, community-based organizations, or local or state government to fill a resource need? What will be the main impact of the Center in its community to contribute to achieving health equity, and how will it be measured? Evaluate any unique features of the CHERC Center activities within the Center, the institution, or the broader community.

#### **B.** Reply to Previous Reviews

If applicable, detail the applicant's response to previous critiques, focusing on the strengths and weaknesses of their reply. Comment on the Center and the individual Sub-Awards individually.

#### C. Evaluation of CHERC PI

Is the CHERC PI an established researcher and qualified to oversee the Center? Do they have a track record of scholarly productivity?

### C. Dissemination of Findings

What is the data sharing plan and is it sufficient and feasible? How will results be shared with the local/regional community and with the scientific community? Will the plan share data/findings/information/products/resources that are meaningful to and useable by the community?

#### D. Community Advisory Board

What is the composition of the Community Advisory Board and what is the expertise of the Board members? Are the roles for the members defined? Evaluate the organization of the Board and the roles of the members. Assess the adequacy of plans for decision making. Will the Advisory Board be integrated with the Center to enable the Center's goals to be realized? How will the Community Advisory Board be involved in activities to disseminate the findings of the research to the community? Is there broad representation across the institution and community, and is the representation sufficient?

#### E. CHERC Sub-Award Applications

Briefly describe the Sub-Award projects and their connection to the Center. Are the proposed Sub-Award projects aligned with the stated goals of the Center, and will the successful completion of the Sub-Awards advance the Center's stated aims? How will the research findings contribute to achieving health equity?

#### F. Environment and Resources

Evaluate the appropriateness of the environment (academic and research) for the proposed Center and Sub-Awards. Include departmental and other institutional personnel, ongoing research and other relevant activities, facilities, resources, access to any populations or individuals to be studied, relevant collaborative relationships, etc. Reference any relevant accreditation from professional societies or organizations. Describe how the presence of these resources will directly benefit the Center. If the Center is collaborating with local or

regional institutions, medical centers, hospitals, community organizations, etc. evaluate the benefit, appropriateness, and impact of these collaborations to the CHERC.

**G. Budget and Compliance Statements** are reviewed but are not considered scoring driving evaluation criteria.

**Note:** Refer to the <u>ACS All Grant Instructions</u> Document for Reviewer Guideline Criteria for the Sub-Award Mechanisms: RSGs, CSDGs, and PFs.

Each sub-award will be evaluated according to these criteria <u>and</u> its relevance to the Center's stated goals and integration into the Center. It should be clearly articulated how the Sub-Awards fit into the Center's goals and aims but also how the Center is utilizing the Sub-Awards to achieve its defined goals and aims.