AMERICAN CANCER SOCIETY

CANCER CONTROL CAREER DEVELOPMENT AWARDS FOR PRIMARY CARE PHYSICIANS

POLICIES AND INSTRUCTIONS

Effective July 2017

ELECTRONIC APPLICATION DEADLINE: OCTOBER 16, 2017

PAPER APPLICATION DEADLINE: OCTOBER 17, 2017

AMERICAN CANCER SOCIETY, INC.
Extramural Grants Department
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PLEASE NOTE: Recent changes to the Cancer Control Career Development Awards for Primary Care Physicians Policies and Instructions are noted in text that is blue.

MISSION

The American Cancer Society's mission is to save lives, celebrate lives, and lead the fight for a world without cancer.
CANCER CONTROL CAREER DEVELOPMENT AWARDS FOR PRIMARY CARE PHYSICIANS

CONTENTS

1. OVERVIEW OF THE EXTRAMURAL RESEARCH AND TRAINING GRANTS PROGRAM OF THE AMERICAN CANCER SOCIETY .......................................................... 3
2. AUTHORITY FOR MAKING GRANTS ........................................................................................................... 8
3. SOURCE OF FUNDS ...................................................................................................................................... 8
4. WHO MAY APPLY ......................................................................................................................................... 8
5. COLLABORATIONS WITH ACS INTRAMURAL SCIENTISTS (IF APPLICABLE) ............................... 9
6. ELIGIBLE INSTITUTIONS AND INSTITUTIONAL RESPONSIBILITIES .................................................... 10
7. TOBACCO-INDUSTRY FUNDING POLICY ................................................................................................. 11
8. PEER REVIEW OF APPLICATIONS ........................................................................................................... 12
9. APPLICATION DEADLINES .......................................................................................................................... 12
10. NOTIFICATION OF APPLICATION RECEIPT AND REVIEW .................................................................... 14
11. GRANT MANAGEMENT AND PAYMENTS .................................................................................................. 14
12. ANNUAL AND FINAL PROGRESS REPORTS ............................................................................................ 15
13. PUBLICATIONS AND OTHER RESEARCH COMMUNICATIONS .......................................................... 15
14. FINANCIAL RECORDS AND REPORTS ...................................................................................................... 16
15. EXPENDITURES .......................................................................................................................................... 16
16. OWNERSHIP OF EQUIPMENT .................................................................................................................. 17
17. INTELLECTUAL PROPERTY RIGHTS ....................................................................................................... 17
18. EXTENSION OF TERM OF GRANT/TRANSFERS/LEAVE OF ABSENCE ........................................... 20
19. CANCELLATION OF GRANT ..................................................................................................................... 21
20. PURPOSE AND DESCRIPTION OF CANCER CONTROL CAREER DEVELOPMENT AWARDS .................................................. 21
21. REQUIREMENTS FOR CANDIDATES ......................................................................................................... 22
22. REQUIREMENTS FOR INSTITUTIONS ......................................................................................................... 22
23. AMOUNT AND TERM OF THE AWARD ...................................................................................................... 24
24. CHANGE OF INSTITUTION OR SPONSOR/MENTOR ................................................................................ 25
25. REQUIRED PROGRESS REPORTS .............................................................................................................. 25
APPENDIX A: GUIDELINES FOR MAINTAINING RESEARCH AND PEER REVIEW INTEGRITY ....................... 26
APPENDIX B: INSTRUCTIONS FOR SUBMITTING DELIVERABLES .............................................................. 36
1. OVERVIEW OF THE EXTRAMURAL RESEARCH AND TRAINING GRANTS PROGRAM OF THE AMERICAN CANCER SOCIETY

With a primary focus on beginning investigators, the American Cancer Society’s Extramural Grants Program seeks to support innovative cancer research across a wide range of disciplines to meet critically important needs in the control of cancer.

Each year, the Society receives approximately 2,000 requests for support of cancer research and for training of health care professionals. All proposals are subjected to multiple levels of rigorous and independent peer review to identify the most meritorious projects for funding.

The Society offers extramural support for research and training via the programs described below. For program specific information, please see Section 20.

GRANT MECHANISMS

RESEARCH GRANTS FOR INDEPENDENT INVESTIGATORS

Research Scholar Grants—Applicants must be independent, self-directed researchers within six years of their first academic appointment. The maximum award is for 4 years and for as much as $165,000 per year (direct costs), plus 20% allowable indirect costs.

The only eligibility exception is in the Priority Focus on Health Equity Research in the Cancer Control and Prevention Research Program, which is restricted to: research studies in psychosocial, behavioral, health policy or health services which address cancer health equity and disparities. In this case, investigators can be at any stage of their career. Additionally, population-based studies that address health equity may propose up to a maximum of 5 years and $400,000 per year (direct costs), plus 20% allowable indirect costs.

Institutional Research Grants—Awarded to institutions as block grants to provide seed money for newly independent investigators to initiate research projects. Grants are made for one to three years, and average $120,000 per year. These grants are renewable.

MENTORED TRAINING AND CAREER DEVELOPMENT GRANTS

Postdoctoral Fellowships—Support for researchers who have received a doctoral degree to provide training leading to an independent career in cancer research. Awards may be for three years with progressive stipends of $48,000, $50,000, and $52,000 per year, plus a $4,000 per year fellowship allowance. In addition, $1,500 will be provided in the last year for travel costs to attend the ACS Postdoctoral Fellows Symposium, if offered that year, or travel to a domestic scientific meeting.

Mentored Research Scholar Grants—Provides support for mentored research and training to full-time junior faculty, typically within the initial four years of their first faculty appointment (see Eligibility Criteria - Section 21 of the Grant Policies and Instructions for further information). The goal is for these beginning investigators to become independent researchers as
either clinician scientists or cancer control and prevention researchers. Awards are for up to five years and for up to $135,000 per year (direct costs), plus 8% allowable indirect costs. A maximum of $10,000 per year for the mentor(s) (regardless of the number of mentors) is included in the $135,000.

**Cancer Control Career Development Awards for Primary Care Physicians**— Support for primary care physicians in supervised programs intended to develop clinical and teaching expertise and the capacity to perform independent research or educational innovation in cancer control. Awards are for 3 years and for up to $100,000 per year. A maximum of $10,000 per year for the mentor(s) may be included in the budget.

**Physician Training Awards in Cancer Prevention**—Awards to institutions to support physician training in accredited preventive medicine residency programs that provide cancer prevention and control research and practice opportunities. Awards are for four and one half years in the total amount of $300,000, based on an average of $50,000 per resident training year. These grants are renewable.

**PREDOMITORAL TRAINING**

**Doctoral Training Grants in Oncology Social Work**—Awards to doctoral students to conduct research related to oncology social work. Initial 2-year grants providing a stipend of $20,000 per year with possibility of a 2-year competitive renewal.

**Master’s Training Grants in Clinical Oncology Social Work**—Awards to institutions to support the training of second-year master’s degree students to provide psychosocial services to persons with cancer and their families. The grant term is **two years** with annual funding of $12,000 (trainee award of $10,000 and $2,000 for faculty professional development). These grants are renewable.

**Doctoral Degree Scholarships in Cancer Nursing**—Provide support for study in a doctoral degree program in nursing or a related area, and prepare the graduate for a career as a cancer nurse scientist. The initial award is for two years and provides a stipend of $15,000 per year. Scholarships may be renewed for an additional two years based on satisfactory progress.

**Graduate Scholarships in Cancer Nursing Practice**—Support for graduate students pursuing a master’s degree in cancer nursing or doctorate of nursing practice (DNP). Awards may be for up to two years with stipend of $10,000 per year.

**AMERICAN CANCER SOCIETY PROFESSOR AWARDS**

**Research Professor Awards**—Awarded to outstanding mid-career investigators who have made seminal contributions that have changed the direction of cancer research. In general, applicants will recently have attained the rank of full professor. The awards are for 5 years in the total amount of $400,000, and may be renewed once.
Clinical Research Professor Awards — Awarded to outstanding mid-career investigators who have made seminal contributions that have changed the direction of clinical, psychosocial, behavioral, health policy or epidemiologic cancer research. In general, applicants will recently have attained the rank of full professor. The awards are for 5 years in the total amount of $400,000, and may be renewed once.

INTERNATIONAL PROGRAM

Audrey Meyer Mars International Fellowships in Clinical Oncology — Support for one year of advanced training in clinical oncology at participating US cancer centers to qualified physicians and surgeons from other countries, particularly countries where advanced training is not readily available. This program is limited to non-US citizens and provides up to US$65,000 for one year. Annual application deadline is February 1.

SPECIAL INITIATIVE

PRIORITY FOCUS ON HEALTH EQUITY RESEARCH IN THE CANCER CONTROL AND PREVENTION RESEARCH GRANTS PROGRAM

Despite the steady overall decline in cancer incidence and mortality rates in the United States, not all population groups have benefited equally. Differences exist in rates of incidence, prevalence, mortality and related adverse health conditions in subgroups of the US population. If application of the existing knowledge about cancer prevention, early detection and treatment were delivered equally, disparities in cancer could be substantially reduced or eliminated. Achieving health equity by establishing inclusive health and social systems whereby all people are treated equitably creates conditions for improving health outcomes.

The American Cancer Society (ACS) has a longstanding history of advocacy, education, community outreach and research in the area of cancer disparities and continues to recognize the importance of research in the area. As highlighted in reports by the Agency for Healthcare Research and Quality and the Institute of Medicine, inequitable differences or health disparities are linked to various determinants of health. The determinants of health are interrelated risk factors that extend across the life span to impact health (Braveman, 2014). Environmental conditions—the conditions in which people are born, live, play, thrive, work and worship—and the available systems supporting health comprise the social determinants of health. Integral to these influences are the economic, political and social policies that exist in and shape communities. Besides sociopolitical influences, biology, genetics/genomics and individual behaviors are also determinants of health. Inequity and health disparities may be further characterized by age, gender, disability status, ethnicity/race, geography, income, language, social class, or sexual orientation. The National Stakeholder Strategy for Achieving Health Equity, supported by the US Department of Health and Human Services Office of Minority Health, presents an action-oriented blueprint to move the nation towards achieving health equity by combating health disparities with a comprehensive, community-driven approach. The ACS has overlapping goals and is committed to addressing cancer health equity through research, education, advocacy and service.
The ACS Extramural Research and Training Grants Department identifies research addressing health equity and health disparities as a priority. Within the Cancer Control and Prevention Research Program of the Department, grant applications in psychosocial and behavioral research and in health policy and health services research focused on achieving health equity and eliminating health disparities are welcome from principal investigators at any career stage. This expanded eligibility is unique to the Priority Area Targeting Health Equity and Health Disparities in Cancer Prevention and Control. Applicants must explicitly specify the following within the application: (1) relevance to cancer generally and cancer disparities specifically; (2) how findings from the proposed research will substantially improve equity in access to cancer prevention, early detection, diagnosis, and/or treatment services; and (3) how findings may be applied to more quickly advance efforts to reduce cancer burden or costs, improve quality of care or quality of life, and/or save more lives. All cancer health equity applications must target two or more determinants of health. Population-based health equity studies must also target two or more levels of influence (individual, interpersonal, organizational, community, or public policy) to propose interventions focused on achieving health equity (McLeroy et al., 1988; CDC, 2014).

Applications will be accepted using one of four mechanisms: Postdoctoral Fellowship, Mentored Research Scholar Grant, Research Scholar Grant, or Clinical Research Professor. Annual deadlines: April 1 and October 15.

References:

Braveman P. What Are Health Disparities and Health Equity? We Need to Be Clear. Nursing in 3D: Diversity, Disparities, and Social Determinants. Public Health Reports. 2014 Supplement 2; 129:1-8


REQUESTS FOR APPLICATIONS (RFAs)

Pilot and Exploratory Projects in Palliative Care of Cancer Patients and their Families — Supports investigators performing pilot and exploratory research studies that test interventions, develop research methodologies, and explore novel areas of research in palliative care of cancer patients and their families. Applications will be accepted via the Pilot and Exploratory Grants Mechanism. The maximum award is for 2 years and up to $60,000 per year (direct costs) plus 20% indirect costs. Annual Deadlines: April 1 and October 15.

Research Scholar Grant in the Role of Health Policy and Healthcare Insurance in Improving Access to Care and Performance in Cancer Prevention, Early Detection, and Treatment Services — This RFA is a call for research that evaluates the impact of the many changes now occurring in the health care system with a particular focus on cancer prevention, control, and treatment. Efforts focusing on improving access to care may also impact inequities that contribute to health disparities. New health public policy initiatives, for example the new
federal and state marketplaces that have expanded insurance coverage, as well as Medicaid expansion in some states, create natural experiments ripe for evaluation. Research to be funded by this RFA should focus on the changes in national, state, and/or local policy and the response to these changes by health care systems, insurers, payers, communities, practices, and patients.

Applications will be accepted via the Research Scholar Grant in Cancer Control and Prevention Program. Award length and budget limits vary; please see the Research Scholar Grant policies and instructions for a detailed description of this RFA. Annual Deadlines: April 1 and October 15.

ACS-MRA RFA: Understanding, Preventing, and Managing Immunotherapy-related Adverse Events (irAEs) Associated with Checkpoint Inhibition for Melanoma and Other Cancers —The American Cancer Society (ACS) and Melanoma Research Alliance (MRA) have each committed $1 million for the awards. The combined $2 million will be used to fund at least one Team Award at $1 million for up to three years and up to five pilot grants at $200,000 each for two years. The purpose of this RFA is to facilitate research focused on prevention, risk, early detection, and management of short- and long-term immune-related adverse events (irAEs) associated with FDA-approved or late-stage development checkpoint cancer immunotherapies for melanoma and other cancers. This RFA will use the American Cancer Society Pilot and Exploratory Projects (PEP) award mechanism and Multidisciplinary Team Award Grant mechanism. Complete instructions on these mechanisms can be found here: Pilot and Exploratory Projects and Multidisciplinary Team Award Grant Mechanism Policies and Instructions. Deadline October 16, 2017 for Pilot Award Proposals and October 31, 2017 for Multidisciplinary Team Award Proposals.

GRANT PROGRAMS

HEALTH PROFESSIONAL TRAINING IN CANCER CONTROL – Virginia Krawiec, MPA, Program Director
This program provides grants in support of nurses, physicians and social workers to pursue training in cancer prevention and control practice. The program’s goal is to accelerate the wide application of research findings in cancer prevention and control by increasing the number of nursing and social work clinicians, and researchers and physicians with expertise and career commitment to cancer control.

MOLECULAR GENETICS & BIOCHEMISTRY OF CANCER – Michael Melner, PhD, Program Director
This program focuses on genes involved in cancer and how alterations in those genes (mutations, deletions, and amplifications) play roles in the process. Of particular interest is the examination of the molecules involved in cancer (proteins, nucleic acids, lipids, and carbohydrates) and how their activities affect the disease. The program highlights new targets for prevention, detection, and treatment of cancer.

CANCER CELL BIOLOGY AND METASTASIS – Charles Saxe, PhD, Program Director
The primary goal of this program is to provide an understanding of the nature of cancer cells so they can be more effectively controlled and eliminated. Emphases include understanding the
fundamental controls of normal and cancer cells with a focus on how cells regulate when to grow, when to divide and when to die; how cells create an identity and how cells relate to the local environment and to other cells; how cells regulate when and how to move from one site to another.

**TRANSLATIONAL CANCER RESEARCH** – Lynne Elmore, PhD, Program Director
This program focuses at the interface between laboratory investigations and human cancer. The scope of the program includes investigations of the role of infectious diseases in cancer, the discovery, synthesis, and delivery of cancer drugs, the creation and use of animal models of cancer, and the role of individual or groups of genes in different types of cancer.

**CLINICAL CANCER RESEARCH, NUTRITION, AND IMMUNOLOGY** – Susanna Greer, PhD, Program Director
This research grant program focuses on investigations including basic, preclinical, clinical, and epidemiological studies. Areas of interest include new modalities for cancer prevention, diagnosis and treatment. In addition, the program seeks to improve understanding of cancer-related inflammatory responses, immunosurveillance, and the use of the immune system for cancer prevention and therapy. The Program also focuses on exposome links to cancer and increased understanding of the effects of nutrition and the environment on cancer prevention, initiation, progression and treatment.

**CANCER CONTROL AND PREVENTION RESEARCH** – Elvan C. Daniels, MD, MPH, Program Director
This research grant program focuses on the development and testing of interventions to influence health behaviors and health care delivery. Research projects in this program focus on cancer risk reduction and delivery of high quality health promotion, screening, early detection and treatment services. The program also includes projects directed at health services, outcomes and policy research to assess the effectiveness of interventions and impact of polices on access to care, quality of care, and costs of cancer care. Special emphasis is placed on health equity research addressing disparities in disadvantaged groups, and social determinants of health that drive inequities.

2. **AUTHORITY FOR MAKING GRANTS**

All American Cancer Society grants and awards are made by the Chief Executive Officer on behalf of the Society’s Board of Directors.

3. **SOURCE OF FUNDS**

The American Cancer Society obtains its funds principally from public donations collected annually by our many dedicated volunteers. In order to disseminate information about the Society’s Extramural Research and Training Grants Program to our volunteers and to the public, grantees may occasionally be asked to give brief presentations to professional and lay audiences.

4. **WHO MAY APPLY**

Applicants for Mentored Research Scholar Grants, Postdoctoral Fellowships, and
Cancer Control Career Development Awards for Primary Care Physicians must at the time of application be United States citizens or permanent residents of the United States. There are no US citizenship requirements for all other grants.

The Society will recognize only one individual as the responsible investigator and, therefore, only one only person should be indicated as principal investigator. The Society does not recognize co-investigators. The principal investigator is responsible and accountable for the overall conduct of the project.

Although applicants may apply for multiple awards, a grantee may not be the principal investigator on more than one ACS Grant at any time. Exceptions are made for recipients of grants that are in response to RFAs and for PIs of Institutional Research Grants.

5. **COLLABORATIONS WITH ACS INTRAMURAL SCIENTISTS (if applicable)**

1) If an Extramural scientist is planning a collaboration with an ACS Intramural Scientist, they may be eligible to submit an application if they meet all other requirement of eligibility. Such collaborations are not required.

2) In most cases, the use of ACS research resources will require that at least one ACS intramural scientist is included as a collaborator on a grant application. Therefore prior to submission of an application, the collaboration between extramural scientists and intramural scientists must be established according to the policies and procedures established by ACS Intramural Research.

3) Intramural scientists and their staff may participate in grants and contracts in a number of ways, including:
   - Serving as unpaid consultants, collaborator, co-investigator or mentor. Intramural scientists may not serve as a principal investigator on an ACS grant or contract.
   - Contributing to the conceptualization, design, execution, or interpretation of a research study.
   - Having primary responsibility for a Specific Aim within a standard research project grant (e.g. RSG).
   - Developing/contributing data for an extramural collaboration.
   - Participating in a multi-institutional collaborative arrangement with extramural researchers for clinical, prevention, or epidemiological studies.

4) ACS Intramural scientists may not receive salary support, travel expenses, or other funds from ACS-funded grants or contracts.

5) The intramural scientist or extramural scientist may have access to reagents, probes, laboratory equipment or access to data and to conduct the extramurally funded portion of the research, as established in their collaborative agreement.

6) While intramural scientists may write a description of the work to be performed by the intramural department, they may not write an applicant’s grant application or contract proposal. However, collaborating intramural scientist should review and approve the appropriate sections.

7) ACS intramural scientist participation must comply with the policies and procedures related to conflict of interest, non-disclosure and disclosure regulations and conflict of interest.

8) ACS intramural scientists must file annual and final research reports related to their activities associate with any grant or contract awarded through the Extramural Grants Department.

6. ELIGIBLE INSTITUTIONS AND INSTITUTIONAL RESPONSIBILITIES

The Society’s grants and awards are made to not-for-profit institutions located within the United States, its territories, and the Commonwealth of Puerto Rico. A not-for-profit institution is one that can provide:

- A current letter from the Internal Revenue Service conferring 501(c)(3) status,
- Documentation of an active cancer research program

Unsolicited grant applications will not be accepted from, nor will grants be made for, the support of research conducted at for-profit institutions, federal government agencies (including the National Laboratories), or organizations supported entirely by the federal government (with the exception of postdoctoral fellowship applications) or organizations, such as Foundations operated by, and for the benefit of, Veteran Affairs Medical Centers, whose primary beneficiaries are federal government entities. Applications may be submitted by qualified academic institutions on behalf of Veteran Affairs Medical Centers, provided that a Dean’s Committee Memorandum of Affiliation is in effect between the two institutions.

The American Cancer Society does not assume responsibility for the conduct of the activities that the grant supports or the acts of the grant recipient as both are under the direction and control of the grantee institution and subject to the institution's medical and scientific policies. Grantee institutions must safeguard the rights and welfare of individuals who participate as subjects in research activities by reviewing proposed activities through an Institutional Review Board (IRB), as specified by the National Institutes of Health Office for Human Research Protections, US Department of Health and Human Services. Furthermore, grantee institutions must adhere to DHHS guidelines as well as ACS guidelines regarding conflicts of interest, recombinant DNA, scientific misconduct, and all other ACS policies and procedures applicable to the grant application and grant. These policies apply to applicants and applicant institutions as well.

To signify agreement by the institution to all ACS policies and procedures, an application for a grant must bear the signature of the official authorized to sign for the institution. Signature of the department head is also required. Additional signatures are at the discretion of the institution.

The institution is responsible for verifying that all documentation related to the application and/or grant, including all representations made by any named researcher (e.g. position or title), is correct. Further, it is the responsibility of the institution to verify that the applicant is either a US citizen or permanent resident with a Resident Alien Card or “Green Card,” where applicable. If the award does not require US citizenship or permanent residency as an eligibility requirement, the institution is responsible for documenting that the applicant is legally eligible to work in the US for the duration of the award. For postdoctoral fellowships, if the terminal degree
is granted after submission of the application, the institution must verify that the degree has been awarded prior to grant activation.

It is the responsibility of the institution to immediately report to ACS any finding that any information presented to ACS in connection with the application and/or grant was false. It is also the responsibility of the institution to immediately report to ACS any action including recertification, loss of certification, breach of conflict, or misconduct, or any change in a named researcher’s employment status with the institution, including administrative leave, which may occur during the term of any award that is pertinent related to the work described in the grant application. Failure to abide by the terms above, or any other ACS policies and procedures in connection with the application and/or grant, may result in ACS suspending grant funding, or canceling the grant, to be decided by ACS in its sole discretion.

By accepting an American Cancer Society award, you agree to the Guidelines for Maintaining Research and Peer Review Integrity that can be found in the appendix of these policies.

7. TOBACCO-INDUSTRY FUNDING POLICY

Scientific investigators or health professionals who are funded by the tobacco industry for any project, or whose named mentors in the case of mentored grants are funded by the tobacco industry for any project, may not apply and will not be eligible for American Cancer Society research and training grants. Scientific investigators, health professionals, or named mentors who accept funding from the tobacco industry for any project during the tenure of an American Cancer Society research or training grant must inform the Society of such funding, whereupon the American Cancer Society grant will immediately be terminated. Tobacco industry funding includes: funds from a company that is engaged in, or has affiliates engaged in the manufacture of tobacco produced for human use; funds in the name of a tobacco brand, whether or not the brand name is used solely for tobacco goods; funds from a body set up by the tobacco industry or by one or more companies engaged in the manufacture of tobacco goods.

The following do not constitute tobacco industry funding for the purposes of this policy:

- Legacies from tobacco industry investments (unless the names of a tobacco company or cigarette brand are associated with them);
- Funding from a trust or foundation established with assets related to the tobacco industry but no longer having any connection with the tobacco industry even though it may bear a name that (for historical reasons) is associated with the tobacco industry.

Tobacco industry funding is defined for purposes of Society grants and awards applicants and recipients as money provided or used for all or any of the costs of the research, including personnel, consumables, equipment, buildings, travel, meetings, and conferences, running (operating) costs for laboratories and offices, but not meetings or conferences unrelated to a particular research project.
8. PEER REVIEW OF APPLICATIONS
The Society’s Scientific Program Directors distribute the applications to the most appropriate Peer Review Committee and then assign each application to at least two committee members for independent and confidential review. Each committee generally has between 12 and 25 members who are leaders in their areas of expertise, plus up to three “stakeholders.” A stakeholder is an individual usually without formal training as a scientist or health professional who has a strong personal interest in advancing the effort to control and prevent cancer through research and training. This interest could stem from a personal experience with the disease, such as survivorship, a family cancer experience, or being a caregiver.

Depending on the grant applied for (see specific sections), the committees evaluate applications based on some or all of the following criteria: (a) the scientific merit, originality, and feasibility of the application; (b) the qualifications, experience and productivity of the applicant, and the members of the investigative team; (c) the facilities and resources available; and (d) the promise of the research or training as related to the control of cancer or to the benefit to be gained by persons with cancer. At the Peer Review Committee meeting, the most competitive applications are discussed and a priority score is voted. Written evaluations of each application are provided to the Council for Extramural Grants (the Council). The Council is a multidisciplinary panel of senior scientists, many having previously served on a Peer Review Committee, up to three stakeholders, and the Chair of the Society’s Research and Medical Affairs Committee serving as an ex officio, non-voting member. After considering the relative merit of the applications, the amount of available funds and the Society’s objectives, the Council establishes the pay line to determine which grants will be funded during each cycle. No voting member of a Peer Review Committee or of the Council may be a member of the ACS staff or serve concurrently on the Board of Directors of the American Cancer Society.

In general, applications that are not funded may be revised and resubmitted twice; postdoctoral fellowship applications may only be resubmitted once. Resubmitted applications will be reviewed in the same detail and compete on an equal basis with all other new applications. (See Instructions for additional information on resubmission of applications.)

9. APPLICATION DEADLINES
Applications for grants and awards must be submitted as paper and electronic copies via proposalCENTRAL. Access is available using links provided in the American Cancer Society web site www.cancer.org (see Instructions). The electronic applications must be submitted at the proposalCENTRAL website by close of business (5:00 PM EST) on the specified deadline date. For the convenience of the applicant, a paper copy is due one day after submission of the electronic copy. If the deadline falls on a weekend or holiday, applications will be accepted the following business day.

No supplemental materials will be accepted after the deadline unless requested by staff for administrative purposes or when requested by the reviewers. The schedule for application receipt and review is provided in the following table.
<table>
<thead>
<tr>
<th>GRANTS</th>
<th>Application* Deadline</th>
<th>Peer Review Meeting</th>
<th>Preliminary Notification</th>
<th>Council Meeting</th>
<th>Grantee Notification</th>
<th>Activation</th>
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<tr>
<td>Research Scholar Grant</td>
<td>April 1 October 15</td>
<td>June January</td>
<td>August March</td>
<td>Sept. March</td>
<td>October April</td>
<td>January 1</td>
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<td>Pilot and Exploratory Projects</td>
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<td>August March</td>
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<td>January 1</td>
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<td>January 1</td>
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<td>Doctoral Training Grant in Oncology Social Work</td>
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<td>March April</td>
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<td>July 1</td>
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<tr>
<td>Graduate Scholarship in Cancer Nursing Practice</td>
<td>February 1 March</td>
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<td>May July</td>
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<td>Audrey Meyer Mars International Fellowships in Clinical Oncology</td>
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<td>April July</td>
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*Paper copy is due one business day following the deadline for electronic copy.
10. NOTIFICATION OF APPLICATION RECEIPT AND REVIEW

Approximately one month after receipt of the application, applicants will receive an email acknowledgment providing an application number, the assigned Peer Review Committee, and the name and telephone number of their Scientific Program Director. This email will be sent to the address in the Professional Profile supplied at the time of submission in proposalCENTRAL. It is important that the address listed in the Professional Profile is a viable mailing address as it will be used to notify you throughout the review and award process.

Preliminary Notification. Following review, preliminary information regarding the status of an application will be emailed along with instructions to download copies of the reviewers’ critiques. The notification will also indicate the likelihood of funding as described by one of the following phrases: experience suggests that (a) your application has been recommended for funding, (b) we cannot predict the likelihood of funding at this time or (c) your application is not likely to be funded. Please note that all final funding decisions are made by the Council for Extramural Grants which typically meets in March and September.

Applicants may call the Extramural Grants Department at anytime during the review cycle. The Program Director and Program Coordinator will shepherd your application through the entire process. Following receipt and careful consideration of the critiques, applicants are encouraged to contact their Program Director to discuss their review. For those applicants considering resubmission, it is strongly encouraged that they contact their Program Director well in advance of the next deadline.

11. GRANT MANAGEMENT AND PAYMENTS

New grantees will receive a packet of information which includes instructions for activation of the award. The activation form as well as other important information about the grant can be found at https://proposalcentral.altum.com. Select the Award tab to see the Post Award Management Site.

Grant payments will be made at the end of each month, except for nursing scholarships and social work grants, which are made once yearly at the beginning of the year. The American Cancer Society requires that all payments are made to the sponsoring institution and are mailed to the address indicated on the grant activation form. Acknowledgment of payment by the sponsoring institution is not required. Continued funding by ACS throughout the grant period is contingent upon institution complying with all of the terms related to the grant; and failure to comply with all of the grant terms may result in a suspension of grant funding, or cancellation of the grant, to be determined by ACS in its sole discretion.

Personnel compensated in whole or in part with funds from the American Cancer Society are not considered employees of the Society. Institutions are responsible for issuing the appropriate IRS tax filings for all individuals receiving compensation from American Cancer Society grants and are responsible for withholding and paying all required federal, state, and local payroll taxes with regard to such compensation. Any tax consequences are the responsibility of the individual recipient and the sponsoring institution. We advise all grant and award recipients to consult a tax advisor regarding the status of their awards.
12. **ANNUAL AND FINAL PROGRESS REPORTS**

The following policies apply to Research Scholar Grants, Mentored Research Scholar Grants, and Postdoctoral Fellowships. For all other grants, see the appropriate "Required Progress Reports" sections. Annual and final reports represent a critical part of responsible stewardship of the donated dollars. We greatly appreciate your efforts to assist us in fulfilling this important commitment to our donors.

A. Both nontechnical and scientific progress reports are to be submitted each year within 60 days after the first and subsequent anniversaries of the start date of the grant, and final reports are due within sixty days after the grant has terminated. To access the necessary forms for annual and final progress reports, please go to [https://proposalcentral.altum.com](https://proposalcentral.altum.com).

B. The final report should cover the entire grant period. In the event a grant has been extended without additional funds, the final report is not due until the official termination date of the grant. If the grant is terminated early, a final report must still be completed within 60 days of the termination date.

C. Reports are to be submitted in a timely manner. If this is not possible, a written request to extend the reporting deadline must be made. Otherwise, noncompliance may result in the withholding of payment on all grants in effect at the recipient institution until reports are received.

D. Please note that up to date annual reports are required when requesting any grant modifications including transfers or no cost extensions.

13. **PUBLICATIONS AND OTHER RESEARCH COMMUNICATIONS**

Publications resulting from research or training activities supported by the American Cancer Society must contain the following acknowledgment: "Supported by (insert name of grant and number) from the American Cancer Society.” In the event that there are multiple sources of support, the acknowledgment should read "Supported in part by (insert name of grant and number) from the American Cancer Society” along with references to other funding sources. The Society’s support should also be acknowledged by the grantee and by the institution in all public communication of work resulting from this grant, including scientific abstracts (where permitted), posters at scientific meetings, press releases or other media communications, and Internet-based communications.

Although there is no formal approval process for publications by Society grantees, it is helpful if investigators notify their Program Directors when manuscripts have been accepted for future publication. This will allow ample time to consider and coordinate any additional public or Society-wide notifications. If your institution decides to send out a press release involving any of your Society-supported research, please notify the ACS Communications representative (phone number on your award letter) or your Program Director in advance.

ACS grants to you a limited, revocable, non-transferable license to use the ACS logo (as shown below) in connection with your funded work. We encourage you to use the following ACS logo on any scientific poster, in a Power Point presentation, or any other visual presentation about
your funded work where the ACS is noted as a funding source. In turn you agree to provide any materials featuring the ACS logo to ACS upon our request.

Permission to use the logo is limited to the uses outlined in the above paragraph. This is not meant to be used to indicate endorsement of products such as guidelines, websites, software for mobile devices/apps), or tool kits, etc.

14. FINANCIAL RECORDS AND REPORTS

A report of expenditures must be submitted within 90 days of the expiration date of the grant as indicated in the award letter. Any change in terms such as a no-cost extension will alter the date that the report is due. There are different reporting requirements for the Institutional Research Grant (please see the “Required Financial Reports” section in the IRG policies). Annual financial reports are not required. To access the necessary forms, please go to https://proposalcentral.altum.com.

Signatures of the principal investigator and the institution’s financial officer are required. Any unexpended funds must be returned to the Society.

Reports are to be submitted in a timely manner. If this is not possible, a written request to extend the reporting deadline must be made. Otherwise, non-compliance may result in the withholding of payment on all grants in effect at the recipient institution until reports are received.

Institutions must maintain separate accounts for each grant, with substantiating invoices available for audit by representatives of the American Cancer Society. The Society is not responsible for expenditures made prior to the start date of the grant, costs incurred after termination or cancellation of the grant, or for commitments against a grant not paid within 60 days following the expiration date, or any expenditure that exceed the total amount of the award. (See also section 19, "Cancellation.")

15. EXPENDITURES

American Cancer Society research grants are not designed to cover the total cost of the research proposed nor the investigator's entire compensation. The grantee's institution is expected to provide the required physical facilities and administrative services normally available at an institution.

For grants that allow indirect costs, the calculation of allowable indirect costs includes all budget items except permanent equipment. See the Instructions for allowable expenditures for Health Professional Training Grants (Nursing Scholarships, Social Work Training Grants, Cancer Control Career Development Awards and Physician Training Awards in Cancer Prevention).

The Society's research grants do not provide funds (direct budget) for such items as:
- Secretarial/administrative salaries
• Student tuition and student fees including graduate and undergraduate; however, tuition is an allowable expense for the principal investigator of a Mentored Research Scholar Grant.
• Foreign travel (special consideration given for attendance at scientific meetings held in Canada)
• Books and periodicals except for required texts for coursework in the approved training plan for MRSGs.
• Membership dues
• Office and laboratory furniture
• Office equipment and supplies
• Rental of office or laboratory space
• Recruiting and relocation expenses
• Non-medical services to patients (travel to a clinical site or patient incentives are allowable expenses)
• Construction, renovation, or maintenance of buildings/laboratories

However, Society research and training grant funds can be used for computer purchases that are for research and training purposes, and can be purchased with direct funds from the equipment budget. See specific policies for different funding mechanisms.

16. OWNERSHIP OF EQUIPMENT

Equipment purchased under American Cancer Society research grants or extensions thereof is for the use of the principal investigator and collaborators. Title of such equipment shall be vested in the institution at which the principal investigator is conducting the research. In the event the American Cancer Society authorizes the transfer of a grant to another institution, equipment necessary for continuation of the research project purchased with the grant funds may be transferred to the new institution. Title to such equipment shall be vested in the new institution.

17. INTELLECTUAL PROPERTY RIGHTS

As a not-for-profit organization supported by public contributions, the Society believes it has the responsibility to adopt policies and practices that enhance the likelihood that potentially beneficial discoveries and inventions will be exploited to the benefit of humankind. It is the desire of the Society that such inventions be administered in such a manner that they are brought into public use at the earliest possible time. The Society recognizes that often this may be best accomplished through patenting and/or licensing of such inventions. Accordingly, the Society has adopted the following patent policy that is binding on all Grantees and Not-for-profit Grantee Institutions (hereinafter "Grantee"), excluding postdoctoral fellowship Grantees at the National Institutes of Health and other government laboratories, for whom the applicable patent policies of the federal government shall apply. Acceptance of a grant from the Society constitutes acceptance of the terms and conditions of this policy. It is a goal of the Society that the terms and conditions of this policy not conflict with the established patent policy of Grantee.

A. All notices required pursuant to this policy shall be in writing, and in this policy, the following terms shall have the meaning set forth below.

i. "Invention" shall mean any potentially patentable discovery, material, method, process, product, program, software or use.
ii. "Funded Invention" shall mean any Invention made in the course of research funded in whole or in part by this Society grant.

iii. "Public Disclosure" shall mean any publication, presentation, offer for sale or any activity that would affect the patentability of the invention under 35 USC. § 102 or 103.

iv. "Net Income" shall mean gross income received by Grantee in respect of a Funded Invention less inventor distributions in accordance with Grantee policy, payments to joint holders of Funded Invention, and unreimbursed directly assignable out-of-pocket expenses resulting from patenting and licensing for Funded Invention.

B. Grantee shall notify the Society of each Funded Invention made by Grantee within thirty (30) days after the disclosure of the Funded Invention to Grantee's Technology Transfer Office or the equivalent thereof. Grantee shall promptly determine whether it desires to seek patent or other statutory protection for all Funded Inventions promptly after each Funded Invention is made and shall promptly inform the Society of all decisions to seek or not seek such protection. The Society shall have the right to seek patent or other statutory protection, at the Society's expense, for any Funded Invention in any country where Grantee has decided not to seek protection or has failed to file an application for such protection within six (6) months after disclosure of the Funded Invention to the Society, and, upon the Society's request, Grantee shall file for patent protection for Funded Invention in such countries as directed by Society at the Society's expense.

C. Grantee shall promptly notify the Society of the filing and issuance or grant of any application for a patent or other statutory rights for a Funded Invention and shall keep the Society reasonably informed of the status and progress of all such applications. Grantee shall pay all costs and expenses incident to all applications for patents or other statutory rights and all patents and other statutory rights that issue thereon owned by Grantee (other than as provided for in Sections B or C). Grantee shall also notify the Society at least sixty (60) days in advance of Grantee's intention to abandon any application for a patent or other statutory right for a Funded Invention or not to take action required to maintain any such application or any patent or other statutory right in a Funded Invention, in which event, at the request of the Society, Grantee shall continue patent protection for Funded Invention as directed by Society at the Society's expense (unless maintenance of such patent rights is inconsistent with Grantee’s good name).

D. Each of the Society and Grantee (the appropriate Grantee technology transfer officer managing Funded Invention) shall promptly inform the other of any suspected infringement of any patent covering a Funded Invention and of any misappropriation, misuse, theft or breach of confidence relating to other proprietary rights in a Funded Invention. Grantee and Society will discuss in good faith further action to be taken in this regard.

E. Grantee shall notify the Society within thirty (30) days of grant of a license, lease, or other revenue generating agreement involving a Funded Invention. In the event that Grantee fails to license a Funded Invention within five (5) years from the issuance of a patent for the
Funded Invention and the Grantee has determined no viable means of commercialization for Funded Invention, Grantee shall license the Funded Invention, with the right to sublicense, to the Society (under standard Grantee license terms on a royalty free basis). However, should the Society receive any revenue from sublicenseing the Funded Invention, it will share that revenue with Grantee on a mutually acceptable basis.

F. Grantee will license a Funded Invention in accordance with Grantee Policy and established practices.

G. i. The Society waives the receipt of income until the Net Income from the Funded Invention exceeds $500,000.

ii. Once the Net Income from a Funded Invention exceeds $500,000, Grantee shall pay the Society annually a percentage of the Net Income from the Funded Invention that is proportionate to the Society's proportion of the financial support for the research that resulted in the Invention. Such royalty payment shall be accompanied by an appropriate statement of account detailing the amount and showing the calculation of Net Income received by Grantee during the preceding year. The Society shall have the right to audit the Grantee's books and records annually, in order to verify the Net Income derived annually from any Funded Invention.

iii. The percentage of Net Income due the Society from a Funded Invention shall be determined by the parties within 90 days of the date the Society is notified by the Grantee (to be extended by mutual agreement of both parties) pursuant to Section E above of the grant of a license, lease or other revenue generating agreement involving the Funded Invention.

If the parties are unable to agree on the percentage of Net Income payable to the Society or any amount owed to Grantee pursuant to Paragraph E above, the dispute (the "Dispute") shall be resolved as follows:

One of the parties shall request (the "Negotiation Request") that each of the parties appoint a designated executive management representative to meet for the purpose of endeavoring to resolve such Dispute. The designated executive representatives, who shall not have been directly involved in the initial negotiations, shall discuss the Dispute and negotiate in good faith in an effort to seek a resolution. During the course of such negotiation, all reasonable requests made by one party to the other for information will be honored so that each of the parties may be fully advised regarding the Dispute. If the designated executive representatives are unable to resolve the Dispute within 30 days after the Negotiation Request, the parties shall mediate the Dispute with a mutually acceptable mediator within the 30-day period beginning 31 days after the Negotiation Request. If the Dispute is not resolved by mediation within 60 days after the Negotiation Request, either party may initiate arbitration by delivering an arbitration demand to the other party (initiator of arbitration will travel to venue of other party), and the Dispute shall be settled by arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("AAA"), except that
(a) there shall be one arbitrator mutually agreed upon by both parties within 30 days after initiation of arbitration and if the parties are unable to agree upon an arbitrator, the arbitrator shall be appointed by AAA;

(b) neither party may submit more than 20 interrogatories, including subparts;

(c) neither party shall be entitled to take more than two depositions and no deposition shall last more than two hours;

(d) all discovery shall be concluded within 90 days of serving the arbitration demand;

(e) each party shall bear its own costs and expenses and attorney's fees and an equal share of the arbitrator fees and any administrative fees of the arbitrator; and

(f) arbitration shall not be utilized if Grantee is prohibited by law from submitting itself to binding arbitration.

The award of the arbitrator shall be binding, and judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof.

Please note that the American Cancer Society is unable to renegotiate the terms of this agreement with any individual institution.

18. EXTENSION OF TERM OF GRANT/TRANSFERS/LEAVE OF ABSENCE

A request for the extension of a grant term without additional funds must be submitted in writing to the Program Director 90 days before the expiration date of the grant. An extension of term request form can be found at https://proposalcentral.altum.com. Please include with the request an estimate of the funds to be carried over into the extension, and an explanation for the delay in completion of the specific aims – which aims remain incomplete and why. In general, a grant may be extended for up to one year if a programmatic need is justified and the funds to be carried over into the no-cost period do not exceed an amount equivalent to one year of support (direct plus indirect).

Requests for a leave of absence will be handled on a case-by-case basis. Please contact the Program Director at least 30 days prior to the proposed beginning of leave.

A grantee who plans to change institutions during the grant period must contact the Program Director to initiate the transfer request process.

Please note that up-to-date annual reports are required prior to approval of any grant modifications including transfers and no cost extensions.

The Society reserves the right to deny requests for extensions, leaves of absence, or transfers.
19. CANCELLATION OF GRANT

If a grant is to be canceled prior to the original termination date, contact your Program Director and please fill out and submit the Request for Cancellation form which can be found at https://proposalcentral.altum.com.

The American Cancer Society may cancel a grant in its sole discretion if the institution fails to comply with all of the terms and obligations related to the grant. In the event a grant is canceled; the institution is only entitled to the prorated amount of the award accumulated between the start and termination dates. If the Postdoctoral Fellowship is cancelled prior to its end date, payments of the fellowship allowance will be prorated on a monthly basis. The Society cannot assume responsibility for expenditures in excess of the prorated amount.

Please note that if the award is to be canceled after initiation of the grant period, a final report will be due within 60 days of the termination date describing the work completed up to that point.

For Master's Training Grants in Clinical Oncology Social Work, Doctoral Training Grants in Oncology Social Work, Graduate Scholarships in Cancer Nursing Practice, and Doctoral Degree Scholarships in Cancer Nursing, withdrawal from the graduate program requires cancellation of the grant.

20. PURPOSE AND DESCRIPTION OF CANCER CONTROL CAREER DEVELOPMENT AWARDS

This program is intended to encourage and assist in the development of promising individuals who will pursue academic careers in primary care specialties with an emphasis on cancer control. Through the Cancer Control Career Development Award, the Society seeks to support primary care physicians in supervised programs that will develop the candidate's clinical and teaching expertise and his/her capacity to perform independent research in cancer control. It is anticipated that medical school faculty trained under these awards will promote cancer control activities and methodology to students and physicians in the academic setting, as well as those in private practice, and enhance the cancer control knowledge base through scholarly activity.

The Society awards Cancer Control Career Development Awards for Primary Care Physicians to provide opportunities for academically oriented primary care physicians to become leaders in primary care practice, education, and research activities related to cancer control. In evaluating applications for this program, the Society places primary emphasis on the qualifications of the prospective candidate and his/her potential as a future leader in the entire spectrum of cancer control, as well as on the ability of the candidate's institution to implement and support the proposed program. It is important that the application document how the award will lead to a career in cancer control.

Cancer Control Career Development Awards for Primary Care Physicians are intended to support the early development of academic careers that place emphasis on cancer control; candidates with established careers and substantial research funding should not apply. Prospective applicants who are unsure of their eligibility or any other of the program requirements should contact the Society for clarification prior to submission of an application. Questions should be directed to:
Virginia Krawiec, MPA  
Director, Health Professional Training in Cancer Control  
Stella Jones, Program Coordinator  
404-329-5734 / stella.jones@cancer.org

21. REQUIREMENTS FOR CANDIDATES

The candidate must have a serious commitment to pursue an academic career in a primary care specialty including demonstrated interest and activities in cancer control. The academic position to be filled by the candidate must be identified on the application form. Candidates for first year Cancer Control Career Development Awards may not have academic rank above that of assistant professor, must not be tenured, or be the section head (or equivalent) in his/her discipline.

Successful applicants must demonstrate teaching ability and must undertake research or other scholarly activities that are to be completed within the period of the award. In addition, the candidate must remain active in the entire spectrum of primary care practice that must also include cancer control activities.

The following eligibility requirements must be met by the date the grant is scheduled to begin (contact the Program Director to confirm eligibility if unsure.):

A. The candidate must have an MD, DO, or an equivalent degree and be licensed to practice medicine.

B. The candidate must have completed the residency requirements of the appropriate primary care specialty. (Note: preventive medicine specialists must have board certification in a primary care specialty.) Additionally, the candidate may not be training as a medical fellow.

C. Generally, no more than ten years may have elapsed between the completion of the candidate's board-required training and the beginning of the award.
   • Exempt Training—fellowships and related training do not count toward the ten year limit.
   • Leave of Absence—an appropriately documented leave of absence will not be counted in the years of eligibility. Leaves of absence may include military service and family leave.

Working in a position that did not allow the applicant to obtain research experience (e.g., with primarily clinical or teaching responsibilities) will be also be considered when eligibility is reviewed.

D. Individuals, who have received or are receiving a career development training award of two or more years in length from any agency, including the American Cancer Society, are not eligible to receive or to continue to receive this award.

22. REQUIREMENTS FOR INSTITUTIONS

The sponsoring institution must provide a commitment for a regular full-time faculty appointment or equivalent for the candidate. The application also should describe a minimum commitment of 50%, ideally 70% - 75% effort (with adequate time for the research project) by the candidate on the activities described in the grant. This will be taken into consideration in judging the likelihood that the candidate will be successful. Evidence of institutional in-kind support is looked upon favorably as well.
The sponsoring institution must be prepared to support the clinical, education, and research activities of the candidate in a comprehensive primary care setting. This support may include facilities; resources; equipment; training programs; seminars; an organized cancer program that will provide continued support to the candidate for participation in cancer prevention, detection, epidemiology, and cancer patient follow up; and/or a relationship with another institution or cancer center.

A three-year institutional program demonstrating progress and maturation in the candidate’s career in primary care and cancer control must be presented in the application. This program must include clinical, education, and research/scholarship components of increasing responsibility during the period of the award. Each of these aspects will be weighted separately in the evaluation of the overall application according to the following scheme (for complete details, please see the Review Criteria in the Appendices):

15% – The candidate’s qualifications for the award including prior training and experiences. Also, the presentation of the proposed program and candidate responsiveness to feedback during the interview;

15% – The participation of the mentor(s) in the proposed program and the institutional resources and commitment to the candidate;

20% – Career development and training plan for the candidate;

10% – Proposed clinical and teaching activities; and the

40% – Proposed cancer control project (research proposal or evaluation of an educational intervention).

The following requirements must be met when submitting an application:

A. The application must document a supervised, well-defined program of clinical and education activities planned for the awardee. It is expected that, over the three-year period of the grant, candidates will incrementally add to their knowledge as well as their clinical and teaching skills in cancer control.

B. The application must document a supervised, well-defined project in cancer control planned for the award period. It is appropriate to propose either a hypothesis-based research project or scholarly project (such as an educational initiative).

Cancer control project topics may be drawn from the broad range of areas that fall into the “cancer control continuum” (from prevention to end of life); generally, the study of behaviors or interventions that enhance cancer prevention and risk reduction, quality of life, and health care outcomes, especially in poor and medically underserved populations. Research approaches may include, but are not limited to epidemiology, behavioral, psychosocial, health services, health policy, and surveillance research.

C. The institution must identify at least one established investigator to serve as a sponsor/mentor to supervise and guide the candidate in his/her program. The mentor(s) must provide
evidence of scholarly activity and successful mentoring of prior faculty. **It is required that the senior sponsor be certified in a primary care specialty.**

Most applications propose a *mentoring team*, as different mentors may be appropriate for different aspects of the program, e.g., the research project. It is acceptable and encouraged that applicants will look outside their departments, schools or institutions to identify suitable mentors. **Appropriate curricula vitae for each must be included on the forms provided in the application.**

D. The institution must provide documentation of existing primary care practice and cancer control programs, resources, facilities, and personnel.

E. The institution is expected to provide a supportive environment for the career development of the candidate including an infrastructure for scholarship (administrative support, statistics and data analysis support, expertise and guidance in research methods) as well as support for proposed clinical activities in cancer control such as a cancer screening clinic. In kind support for these activities as well as some of the candidate’s time and effort is viewed as a favorable indicator of the commitment of the institution to the development of the candidate.

F. A letter of support from the local office (Division or Unit) of the American Cancer Society must be submitted with the application.

G. The sponsor/mentor must demonstrate how the funds from the Cancer Control Career Development Award will be used to advance the candidate's career in primary care and cancer control. Possible benefits include (but are not limited to):

- A documented decrease in the clinical and/or administrative responsibilities of the candidate due to this award. It is important that the institution clearly explains how funding from this grant would allow the candidate to spend additional time involved in activities described in this application.
- A documented increase in the resources made available to the candidate due to this award. Itemize additional resources, e.g., additional personnel, funding, space, and equipment given to the candidate if he/she receives this award.
- Additional advanced training. Describe any additional advanced training which will be made possible by the funds associated with this award, i.e., training not offered to other faculty not receiving the award, postgraduate courses, etc.

23. **AMOUNT AND TERM OF THE AWARD**

The Cancer Control Career Development Award (CCCDA) is intended to provide the awardee with support for a three-year individualized program. The award shall be up to $100,000 for each year of the award. In acknowledgement of the importance of the mentor’s support to the CCCDA program, salary and benefits for the mentor may also be charged to the grant in an amount up to $10,000 per year (the total amount of the award may not exceed $300,000). No portion of the grant may be used for indirect costs.

The recipient cannot receive concurrent support from a similar career development training award (see Section 21D). There is no objection to reasonable salary supplementation from
research grants (other than research grants of the American Cancer Society) or institutional funds when the individual’s abilities and circumstances warrant it in the judgment of his/her institution. Such supplementation must not entail duties that will interfere with or detract from the program and must be reported to the American Cancer Society.

**Extension Without Additional Funds:** The termination date of any grant may be extended for up to one year without additional funds upon written request from the principal investigator. This request must be received before the expiration date of the grant.

24. **CHANGE OF INSTITUTION OR SPONSOR/MENTOR**

Any proposed change to a grant-in-effect will be considered on a case-by-case basis.

**Change of Mentor(s):** Since the sponsor/mentor has a major role in guiding and supervising the development of the candidate's academic career, any change of the candidate's sponsor/mentor(s) during the period of the grant must receive written approval from the American Cancer Society. The Society requires that a two-page biographical form be submitted for each new sponsor/mentor. Contact the American Cancer Society to obtain this form.

**Change of Institution:** Transfer of the grant from one institution to another is generally not permitted. If a change in institution is desired, and especially if a change in mentor and/or project would occur, a new application may be requested. Contact the Program Director for further information.

25. **REQUIRED PROGRESS REPORTS**

A progress report from both the grantee and the sponsor/mentor must be submitted one month prior to the completion of each year of the award. Guidelines for these reports will be forwarded with the award letter. Past reports may be considered when evaluating future applications from a particular program.
APPENDIX A: GUIDELINES FOR MAINTAINING RESEARCH AND PEER REVIEW INTEGRITY

The American Cancer Society seeks excellence in the discovery and dissemination of knowledge regarding the cause, prevention, detection and diagnosis, treatment, survivorship and health policy of cancer. This requires that all individuals affiliated with, or funded by, the American Cancer Society adhere to the highest standards of professional integrity. Volunteer grant reviewers for the American Cancer Society will also be held to the highest codes of conduct and integrity in performing their essential function of peer review.

The American Cancer Society provides grant funds for individuals at academic and other not-for-profit institutions to promote cancer-related training, research and treatment. This represents a contractual relationship with such institutions, and it is an accepted responsibility and obligation of those institutions to provide policies and procedures for their faculty, staff and students that address possible misconduct in training, research and treatment of patients. Moreover, it is the responsibility and obligation of faculty, students and staff engaged in scientific research and training to be aware of policies and procedures for addressing possible misconduct at their institutions, and to follow those procedures in reporting possible misconduct.

While questions of the integrity of applicants, grantees, and reviewers are very infrequent, they do occur. It is the responsibility of the Program Directors managing the review process and portfolios of funded grants and the responsibility of the Senior Vice President for Extramural Research to ensure that all questions regarding research integrity are handled in a discrete, but thorough manner. The actions of the Program Directors and the Senior Vice President for Extramural Research must ensure the confidentiality and anonymity of the individual raising the question of misconduct; ensure the integrity of the American Cancer Society and its review processes; ensure the rights of the individual accused of misconduct; and ensure their own credibility and integrity.

Article I

Standards and Definitions:

1.1 Research Misconduct by Applicants or Grantees

The American Cancer Society uses the following definitions related to scientific misconduct outlined in the Federal Guidelines [Federal Register, Vol. 65, No. 235, ppg. 76260-76264].

- Research misconduct is defined as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.¹
- Research, as used herein, includes all basic, applied, and demonstration research in all fields of science, engineering, and mathematics. This includes, but is not limited to, research in economics, education, linguistics, medicine, biology,
chemistry, psychology, natural sciences, social sciences, statistics, and research involving human subjects or animals.¹

- Fabrication is defined as making up data or results and recording or reporting them.¹
- Falsification is defined as manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.¹
- The research record is defined as the record of data or results that embody the facts resulting from scientific inquiry, and includes, but is not limited to, research proposals, laboratory records, both physical and electronic, progress reports, abstracts, theses, oral presentations, internal reports, and journal articles.¹
- Plagiarism is defined as the appropriation of another person’s ideas, processes, results, or words without giving appropriate credit.
- Research misconduct does not include honest error or differences of opinion.¹
- Reported Qualifications must be accurate (e.g. years since degree earned).

### 1.2 Research Misconduct by Peer Review Committee Members

The American Cancer Society has adopted the following definitions of misconduct in review by members of a Peer Review Committee. Misconduct in review is defined as:

- Review for an application for which there is a clear conflict of interest between the reviewer and applicant. What is considered a COI – a recent publication, grant collaboration, trained together
- Failure to notify ACS personnel of actual, potential, perceived or potentially perceived conflicts of interest.
- Any communication pertaining to review related materials between a member[s] of a peer review committee and an applicant, or the mentor of an applicant, in the case of applications with an element of training as part of the application.
- Any communication of the unpublished content of a grant application by a member or members of a peer review committee with any individual who is not a permanent or ad hoc member of the peer review committee to which an application is assigned, or who has not been approved by the Program Director for such communication.
- Any use of the unpublished content or concepts of a grant application in pursuit of scientific or career goals by a member of a peer review committee.
- Any review of, or use of, the contents of a grant application by a member or members of a peer review committee who might have, or be perceived to have, a conflict of interest with the applicant or his/her mentor, in the case of applications with an element of training as part of the application.

¹ The above definitions are outlined in the Federal Guidelines [Federal Register, Vol.65, No.235, ppg: 76260-76264]
1.3 Confidentiality Standard for Reviewers

To preserve the integrity of the peer review process, all parties involved in the review process must adhere to the following practices regarding confidentiality and non-disclosure:

- Reviewers must not discuss applications reviewed with any individual not designated as a part of the review process; and especially not with applicants, or their mentors in the case of training grants, either before or after the peer review meetings.
- Any inquiries to a peer review panel member regarding an application from an applicant, PI, Co-PIs, consultants or their mentor, to a member of a Peer Review Committee or ACS Council for Extramural Grants must be reported immediately to the Program Director.
- All materials related to the review process must be destroyed or given to the Program Coordinator at the end of the review meeting.
- For purposes of this standard, materials related to the review process include, but are not limited to: paper, bound volumes, compact disks (CDs), flashdrives, electronic files accessed via the internet, or oral presentations or discussions.

1.4 Conflict of Interest Standard for Reviewers

To preserve the integrity of the peer review process, all participants in the process must adhere to these principles and practices:

- Reviewers must not be an employer or employee of an applicant, and may not be employed by the same institution as an applicant within three years of the date of submission of an application
- Reviewers must not be a party to any agreement for future employment or other agreements or arrangements with an applicant or any person listed as key personnel on an application
- Reviewers must not have served as mentors or collaborators of an applicant within 3 years of the date of an application
- Reviewers must not participate in the review of an application submitted by a standing member of a Peer Review Committee serving on the same review committee, with the exception of Health Professional Training Grants or Institutional Research Grants
- Reviewers must not be under the health care of, or providing health care to, an applicant or any person listed as key personnel on an application
- Reviewers must not have received or have the potential to receive direct financial benefit from the application
- Reviewers must not be pursuing research projects which might be viewed as being in direct competition with applicants or their collaborators and colleagues; nor have potential to receive direct benefit from failure of the application to be funded
• Reviewers must not have any cause of action against, any dispute with, any long-standing scientific or personal differences with, or any claim whatsoever against the applicant or any person listed as key personnel on an application

Articles II

Policies:

2.1 Policy Governing Misconduct by Applicants and Grantees

2.1.1 Applicants:

Any allegations of scientific misconduct must be brought to the immediate attention of the Program Director in charge of the Peer Review Committee which is responsible for reviewing the work in question. If possible, allegations of misconduct on the part of an applicant in the submission of a grant proposal should be raised in advance of the review meeting. The Program Director will then bring the allegation to the attention of the Senior Vice President for Extramural Research at ACS. The Senior Vice President for Extramural Research will evaluate the allegation and make a determination on the misconduct issue and the appropriate next steps to be taken to engage in further investigation or action in accordance with Article III “Procedures for Handling Conflicts of Interest and Allegations or Findings of Misconduct in Research and Peer Review”.

2.1.2 Grantees:

In instances where alleged scientific misconduct occurs after the awarding of a grant, such as in the publication of falsified data, the Program Director will bring the allegation to the attention of the Senior Vice President for Extramural Research at ACS. The Senior Vice President for Extramural Research will evaluate the allegation and make a determination of the appropriate steps to be taken to engage in further investigation or action as defined in Article III, “Procedures for Handling Conflicts of Interest and Allegations or Findings of Misconduct in Research and Peer Review”.

2.2 Policy Governing Misconduct by Peer Review Committee Members

2.2.1 Confidentiality:

Confidentiality is at the heart of the peer review process and is imperative for objective evaluation and free expression in the review process. The applicant-reviewer relationship is a privileged alliance founded on the ethical rule of confidentiality. To maintain the essence and integrity of the peer review process, the Society and its appointed peer reviewers must ensure and be assured that the confidentiality of the applicant’s information, the contents of the grant application, and of the proceedings of the review panel will be maintained. Such confidentiality adheres when a person discloses information to another with the understanding that the information will not be divulged to others without the discloser’s consent, or as otherwise required by law. In the context of peer review, this rule upholds the applicants’ rights to have the
information they submit, whether in proposal form or in communications, kept confidential. The rule also ensures that those involved in the review process maintain their obligation to keep confidential any information concerning an application. In fact, the very existence of a submission should not be revealed (or confirmed) to anyone other than those within the review process unless and until the application is funded.

To this end, all contents, evaluation and discussion of applications shall be confined to Peer Review Committee (PRC) members and ACS staff personnel (Program Director, Senior Vice President for Extramural Research, Program Coordinator, support staff) responsible for managing the review process of that PRC. For these purposes, reviewers include all standing and ad hoc reviewers of PRCs and members of the Council for Extramural Grants. In rare and specific instances, discussion of applications with, or in the presence of, non-committee members can occur after obtaining the written consent of the Program Director. Reviewers must not discuss reviews with applicants or their mentors in the case of training grants, either before or after the review meetings. Reviewers also must not communicate the contents of any grant applications with individuals not associated with the review process. Any materials related to the review process must be disposed of at the meeting, and all final critiques given to the Program Director for inclusion in summary statements.

If an allegation of a breach of reviewer confidentiality is brought forward, that allegation will be communicated to the Senior Vice President for Extramural Research who will determine if an investigation of that allegation is warranted. The Senior Vice President for Extramural Research will then follow the appropriate steps as defined in Article III, “Procedures for Handling Conflicts of Interest and Allegations or Findings of Misconduct in Research and Peer Review”.

2.2.2 Conflict of Interest:

An objective evaluation of grant proposals is essential to the peer review process. In achieving this goal, there must be no conflict of interest, apparent conflict of interest or pending future conflict of interest between any participant in the review process and the applicants or their collaborators and colleagues. In this setting, reviewers include standing and ad hoc Peer Review Committee (PRC) members and members of the ACS Council for Extramural Grants responsible for, and participating in, the review process. There are numerous bases for conflicts of interest, and these can include: employment, professional relationships, personal relationships, financial benefit, industry affiliation or other interests. The conflicts can be real or apparent. For Definitions of Conflict of Interest, refer to Section 1.4.

Reviewers may not make use of any of the contents of a grant for their own research purposes or those of their collaborators and colleagues. Reviewers must exercise proper due diligence in investigating and disclosing any potential conflict of interest that might exist between themselves and an applicant or the applicant’s collaborators or mentors. The Conflict of Interest Statement attached as EXHIBIT A shall be submitted to the Senior Vice President for Extramural Research for review at least sixty (60) days prior to the beginning of the Peer Review cycle.
If an allegation of a reviewer conflict of interest is brought forward, that allegation will be communicated to the Senior Vice President for Extramural Research who will determine if an investigation of that allegation is warranted. The Senior Vice President for Extramural Research will then follow the appropriate steps as defined in Article III “Procedures for Handling Conflicts of Interest and Allegations or Findings of Misconduct”.

**Article III**

**Procedures for Handling Conflicts of Interest and Allegations or Findings of Misconduct:**

To ensure the integrity of the peer review process and the integrity of ACS-sponsored research, it is necessary that the procedures for dealing with allegations of misconduct be clearly understood by all reviewers and ACS personnel. Procedures for handling allegations of misconduct by applicants, grantees and reviewers are detailed in the following sections.

3.1 Procedures for Handling an Allegation of Scientific Misconduct by Applicants or Grantees

3.1.1 Misconduct by Applicants:

In the event that an allegation of scientific misconduct by an applicant is brought forward to a Program Director or other ACS staff, all effort must be made to investigate the validity of the allegation while maintaining the confidentiality of the individual making the allegation, the anonymity of the person against whom the allegation is made, and the integrity of the review process. The Program Director must immediately inform the Senior Vice President for Extramural Research of the allegation, and provide all relevant information regarding the allegation. It is the Senior Vice President’s responsibility to evaluate the likelihood of scientific misconduct; and, if warranted, it is the Senior Vice President’s responsibility to contact the appropriate institutional office at the applicant’s institution regarding the allegation. The Senior Vice President for Extramural Research will then serve as the point of contact between the ACS and the institutional official[s] handling issues of scientific misconduct.

If determined to be appropriate, the Senior Vice President for Extramural Research will forward an allegation of misconduct and all pertinent information to the Research Integrity Officer at the institution sponsoring the grant application in question or at which the alleged misconduct was carried out. If there is not a Research Integrity Officer, the Dean of the School in question or its chief academic officer will be contacted. In the instance that the person[s] making the allegation does not contact the American Cancer Society but raises the allegation of misconduct with the appropriate institutional official according to their established institutional procedures, it is the responsibility of the institution to contact the American Cancer Society regarding the allegation, any investigation of the allegation, and the outcome of that investigation. All such correspondence will be held in strict confidence, and will not be made public by the American Cancer Society irrespective of the outcome of the investigation. The American Cancer Society assumes no responsibility in carrying out the investigation of scientific misconduct, or in determining an individual’s innocence or guilt of the allegation of misconduct.
However, acceptance or non-acceptance of the findings of the institutional investigation is at the discretion of the Senior Vice President, and additional clarification may be requested.

Allegations of scientific misconduct in a grant application may be made by individuals who are colleagues, trainees, or reviewers. In the instance that an allegation of misconduct is made in reference to a grant application, the Senior Vice President for Extramural Research will contact the institutional official at the sponsoring research institution and seek to follow their established protocol for investigating such allegations. If an investigation is deemed necessary, it will be the responsibility of the sponsoring institution to carry out the investigation, to keep the ACS aware of the progress, and to report the outcome of the investigation to the Senior Vice President for Extramural Research.

In fairness to the applicant, the review process must continue while the allegation of misconduct undergoes assessment. Review may continue either in the standing review committee or under the By-pass to Council review mechanism. Under no circumstance should a reviewer, Program Director or ACS staff raise the issue of the allegation in a peer review meeting or meeting of ACS Council for Extramural Grants. If that were to occur, review of that application could not be completed without bias; and review of the application must therefore be deferred to ad hoc reviewers or the ACS Council for Extramural Grants. If a reviewer suspects misconduct, which is discovered at the time of the meeting, it is appropriate to request the Chair of the PRC or Council take a "break" and discuss the issue privately with the Program Director. The Program Director will then take the prescribed administrative steps following the adjournment of the review meeting.

The ACS will complete the process of peer review of the application, but will suspend any administrative action which would result in funding of the award in question until the resolution of the investigation. At the conclusion of the investigation, the ACS will require the Office of Research Integrity or comparable entity at the applicant’s sponsoring institution to provide a written statement detailing the results of the investigation. Failure of the institution to carry out such an investigation in a timely manner or to provide written results of the investigation will result in the administrative disapproval of the application. If the applicant is absolved of any scientific misconduct, the ACS will reinstitute administrative action that can result in funding for the award if it was approved and is within the pay-line established by ACS Council for Extramural Grants. In the instance that misconduct has occurred, the ACS will administratively inactive the application. Also, in the case of a finding of scientific misconduct, the investigator may no longer be eligible to participate in ACS funded awards, either as principal investigator, co-investigator, collaborator, mentor or consultant. The investigator also may not be eligible to serve in any capacity in reviewing ACS grant proposals.

3.1.2 Misconduct by Grantees:

In the event that an allegation of scientific misconduct by a grantee is brought forward to a Program Director or other ACS staff, all effort must be made to investigate the validity of the allegation while maintaining the confidentiality of the individual making the allegation and the anonymity of the person against whom the allegation is made. The Program Director or ACS staff contacted about the alleged misconduct must immediately inform the Senior Vice President
for Extramural Research of the allegation, and provide all relevant information regarding the allegation. It is the Senior Vice President’s responsibility to evaluate the likelihood of scientific misconduct; and, if warranted, it is the Senior Vice President for Extramural Research’s responsibility to contact the appropriate institutional office at the applicant’s institution regarding the allegation. The Senior Vice President for Extramural Research will then serve as the point of contact between the ACS and the institutional official[s] handling issues of scientific misconduct.

If determined to be appropriate, the Senior Vice President for Extramural Research will forward an allegation of misconduct and all pertinent information to the Research Integrity Officer at the institution sponsoring the grant in question or at which the alleged misconduct was carried out. If there is not a Research Integrity Officer, the Dean of the School in question or its chief academic officer will be contacted. In the instance that the person[s] making the allegation does not contact the American Cancer Society but raises the allegation of misconduct with the appropriate institutional official according to their established institutional procedures, it is the responsibility of the institution to contact the American Cancer Society regarding the allegation, any investigation of the allegation, and the outcome of that investigation. All such correspondence will be held in strict confidence, and will not be made public by the American Cancer Society irrespective of the outcome of the investigation. The American Cancer Society assumes no responsibility in carrying out the investigation of scientific misconduct, or in determining an individual’s innocence or guilt of the allegation of misconduct. However, failure of the institution to immediately notify ACS of an allegation and/or investigation of misconduct, or to carry out a misconduct investigation in a timely manner, or to provide written results of the investigation, is in non-conformance with the terms and obligations of the grant and may result in the suspension of ACS funds for all grants awarded at the institution, to be decided by ACS in its sole discretion. The American Cancer Society assumes no responsibility in carrying out the investigation of scientific misconduct, or in determining an individual’s innocence or guilt of the allegation of misconduct. However, acceptance or non-acceptance of the findings of the institutional investigation is at the discretion of the Senior Vice President, and additional clarification may be requested.

If the investigator has an active ACS award, funding of that award will be suspended until the allegation has either been confirmed or be proven to be erroneous. If the allegation is proven not to have merit, the award may be reinstituted by ACS at the date of notification of those findings by the sponsoring institution. If the allegation of misconduct is confirmed, the award will be terminated and any residual funds, as of the date of notification of the sponsoring institution of the allegation, must be returned to the ACS. In the case of a finding of scientific misconduct, the investigator may no longer be eligible to participate in ACS funded awards, either as principal investigator, co-investigator, collaborator, mentor, or consultant. The investigator may also not be eligible to serve in any capacity in reviewing ACS grant proposals.

The publication of data serves to further the interests of the scientific pursuit, and specifically in the case of the ACS, the pursuit of eliminating the burden of cancer. Therefore, it is incumbent on both the ACS and the scientific community to insure that any instances of misrepresentation of findings in a scientific study are apparent to the scientific community. To that end, a finding of falsification or misrepresentation of data in a published forum must be
reported to the editor-in-chief of the journal in which such data is reported. It is the responsibility of the Senior Vice President for Extramural Research to coordinate such notification with the appropriate sponsoring institutional official according to their established policies and in conjunction with the policies of the journal. If the sponsoring institution does not have a policy regarding notification of the journal, then the Senior Vice President for Extramural Research will notify the editor-in-chief of the journal according to the journal’s established policies.

In the case of findings of falsification or misrepresentation of published data supported by ACS funds, any active grant[s] held by the responsible individual will be terminated and that individual may no longer be eligible for ACS funding via any mechanism as a principal investigator, co-investigator, collaborator, mentor, or consultant. That individual may also not be eligible to participate in ACS review in any capacity.

3.1.3 Reviewer Misconduct and Conflict of Interest

In the event that an allegation of reviewer misconduct, such as failure to acknowledge a conflict of interest, is brought forward to a Program Director or other ACS staff, all effort must be made to investigate the validity of the allegation while maintaining the confidentiality of the individual making the allegation, the anonymity of the person against whom the allegation is made, and the integrity of the review process. The Program Director or other ACS staff contacted regarding the alleged misconduct must immediately inform the Senior Vice President for Extramural Research of the allegation, and provide all relevant information regarding the allegation. It is the Senior Vice President for Extramural Research’s responsibility to evaluate the likelihood of reviewer conflict of interest or misconduct; and, if warranted, it is the Senior Vice President for Extramural Research’s responsibility to handle the investigation internally or to inform the appropriate institutional office at the reviewer’s institution about the allegation if aspects of the reviewer misconduct violate any of the tenets of professional behavior established by that institution. The Senior Vice President for Extramural Research will then serve as the point of contact between the ACS and the institutional official handling issues of reviewer misconduct.

Some elements of reviewer misconduct represent conduct that will only have relevance for the appropriateness of the reviewer’s role as a member of a peer review committee. For instance, if there is inappropriate communication between reviewer and applicant or an applicant’s mentor or colleagues. In a case of this type, all elements of the investigation of the reviewer misconduct will be handled by ACS personnel at the discretion of the Senior Vice President for Extramural Research. In cases where a reviewer does not retain the confidentiality of the applicant’s information or the content of his or her application, and makes that information available to a third party, it will be at the discretion of the Senior Vice President for Extramural Research to handle the issue internally at ACS or contact the Office of Research Integrity at the reviewer’s institution, based upon an initial assessment of whether such conduct violates the rules of conduct established by that institution. For instance, if there is communication of the contents of a grant proposal by a reviewer to a competitor in the same field as the applicant, or if the reviewer makes use of findings or ideas in an application to further his or her own research interests. In the instance of such an allegation, the American Cancer Society assumes no responsibility for carrying out the investigation of scientific misconduct, or in determining an
individual’s innocence or guilt of the allegation of misconduct. It is the institution’s responsibility to handle the misconduct according to their established procedures. However, acceptance or non-acceptance of the findings of the institutional investigation is at the discretion of the Senior Vice President, and additional clarification may be requested. In any instance of a finding of reviewer misconduct, that individual may no longer be eligible to serve in any capacity in reviewing ACS grant proposals, and may be barred from receiving any ACS grant funds.

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APPENDIX B: INSTRUCTIONS FOR SUBMITTING DELIVERABLES

GRANT ACTIVATION FORMS
ANNUAL PROGRESS/FINAL REPORTS
TRANSFER REQUEST
CHANGE OF INSTITUTION
CHANGE OF TERM EXTENSION OF TERM
GRANT CANCELLATION
CHANGE OF PRINCIPAL INVESTIGATOR
REPORTS OF EXPENDITURES

The American Cancer Society subscribes to the Post Award Management System provided by Altum proposalCENTRAL. The system is designed to collect grant post award information from grantees. Grantees are asked to keep their proposalCENTRAL profile current for the duration of the grant.

The site is used to upload all requests for grant changes and related documents, and required reports (deliverables). The site will house all reports, requests and correspondence pertaining to a grant and is accessible to both ACS program staff and grantees. Grantees may provide access to others at their institution (e.g. grants officers) using the instructions provided below.

All awardees of an ACS grant will need to upload deliverables, and then send an email (correspondence) to the Program Director/Program Coordinator informing the program office of the submitted deliverables. The first deliverable we will be collecting through the Post Award Management System is the “Activation Form.” For the Activation Form only, please also email Sherae Gillespie at sherae.gillespie@cancer.org in the Extramural Research Business office notifying her that you have uploaded your Grant Activation Form.

Uploading an Award Deliverable
- Log onto https://proposalcentral.altum.com
- PI must enter their ProposalCentral username and password in “Applicant Login” to access their award detail information
- Click on the Awarded link or all Proposal link
- In the Status column, click on the Award Details link
- On the Award Details screen, click on the Deliverables link at the bottom of the screen

The schedule of deliverables due for the award is shown chronologically.
- Go to the Deliverables Templates section at the bottom section of the screen to select the appropriate template
- Download and save the template to your computer and complete it.
- To Submit Grant Deliverables and other documents, click the Upload link next to the scheduled deliverable and date
- Click “Browse” button to select the file from your computer.
- Click Save to upload the deliverable. You can replace the uploaded document with another document by clicking Browse…again, selecting a different document from your computer files and click the Save (Adding description of deliverable is optional)
- Click Close

**Send Email (Correspondence) to an ACS Administrator**
- To send correspondence to Program Director at the ACS, click the “Correspondence” link from the Award Details screen
- From this page, you can see any correspondence that has already been sent by clicking on the Blue link in the Message column
- Use the Respond link to respond directly to a message you have received
- To send a new message, click “Send Correspondence to Program Director” at the top of the page
- Select the administrator(s) who should receive the correspondence email
- Enter a subject and text for the correspondence in the spaces provided
- Click the “Send Email” button to send the email(s) to the selected administrator

Once an application is awarded it moves from proposalCENTRAL into the Post Award Management System. People who previously had access to your application in proposalCENTRAL will not have access to your awarded grant in the Post Award Management System. You may need to allow access to different users than those listed in proposalCENTRAL to enable them to upload various reports on your behalf.

**To allow to another user access to your award and to submit deliverable**
- Person(s) must be a registered user on proposalCENTRAL. If they are not, ask them to register as a new user at:
  
  [https://proposalcentral.altum.com/login.asp](https://proposalcentral.altum.com/login.asp)
- Once user is registered, from Award Detail screen click Contacts and User Access link
- Click on Manage User Access To Award at the top of the screen
- Enter and confirm email address of person
- Click on Add button
- Change the Permissions role from View to Administrator
- Click on Save button to activate access for new person

**To upload other documents such as publications, CV, etc.:**
- Click the "Add Deliverable" link on the Award Deliverable screen
- Select "Other" from the drop down menu next to "Deliverable Type" from the pop up screen
- Type in the "Deliverable Description" (i.e. Publications; CV; etc...) (i.e. Publications; CV; etc...)
- Click "Browse" to upload their document
- Click "Save"

Additional information and help can be obtained through proposalCENTRAL customer support desk:

  By phone: 1-800-875-2562 toll free       By email: pcsupport@altum.com
CANCER CONTROL CAREER DEVELOPMENT AWARDS
FOR PRIMARY CARE PHYSICIANS

INSTRUCTIONS

CONTENTS

A. GENERAL INFORMATION ........................................................................................................................................ 2
1. ACCESSING THE ACS GRANT APPLICATION SYSTEM ...................................................................................... 2
2. FORMATTING THE APPLICATION ....................................................................................................................... 2
3. RESUBMISSION OF AN APPLICATION .................................................................................................................. 3
4. CHANGES TO THE APPLICATION ......................................................................................................................... 3
5. EXPLANATION OF REQUIRED INFORMATION ................................................................................................ 3
6. GENERAL AUDIENCE SUMMARY .................................................................................................................... 5
7. STRUCTURED TECHNICAL ABSTRACT ................................................................................................................. 5
8. PROJECT CODING .................................................................................................................................................. 6
9. ASSURANCES AND CERTIFICATION .................................................................................................................. 6
10. PI DATA SHEET .................................................................................................................................................... 7
11. APPLICATION SUBMISSION AND REQUIRED SIGNATURES ................................................................................ 7

B. PREPARING THE APPLICATION ........................................................................................................................... 9
1. APPLICATION TEMPLATES .................................................................................................................................... 9
2. TABLE OF CONTENTS (PAGE 1.1) ........................................................................................................................ 10
3. DETAILED BUDGET AND JUSTIFICATION OF BUDGET (PAGE 2.1) ................................................................. 10
4. OTHER SUPPORT (PAGE 3.1) .............................................................................................................................. 11
5. REPLY TO PREVIOUS REVIEW (RESUBMISSIONS ONLY) (PAGE 4.1) ............................................................. 12
6. PREVIOUS CRITIQUES (RESUBMISSIONS ONLY) .............................................................................................. 12
7. PROGRAM PLAN PART I – CANDIDATE (PAGE 5.1) ............................................................................................. 12
8. PROGRAM PLAN PART II – SPONSOR/MENTOR (PAGE 6.1) ........................................................................... 14
9. BIOGRAPHICAL SKETCH FOR SPONSOR/MENTOR(S) (PAGE 7.1) ............................................................... 15
10. LETTERS OF RECOMMENDATION .................................................................................................................. 16
11. APPLICATION APPENDIX .................................................................................................................................... 16

APPENDIX A: CLASSIFICATION CATEGORIES - AREAS OF RESEARCH .............................................................. 17
APPENDIX B: SAMPLE OF GENERAL AUDIENCE SUMMARY ............................................................................. 30
APPENDIX C: CRITERIA FOR THE REVIEW OF APPLICATIONS ........................................................................... 31
A. GENERAL INFORMATION

1. ACCESSING THE ACS GRANT APPLICATION SYSTEM

Access the American Cancer Society Research site at www.cancer.org.
- Select “Explore Research” followed by “Apply for a Research Grant” > “Grant Types”.
- Select the grant for which you are applying. You are now able to access the electronic grant application process at proposalCENTRAL.
- Once you reach proposalCENTRAL, follow their instructions to login/register and to complete and submit an application.
- The key steps for starting an application are as follows:
  - Click on “Create New Proposal” to select a grant program and start your grant application. Locate the appropriate grant and click on “Apply Now” to create a proposal. Enter a Project Title (unless one is provided) and click SAVE. Once you have clicked on the “Save” button, the links to the other pages of the application appear in the Proposal Sections menu. Your saved application is stored under the “Manage Proposals” tab.

Please note: 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

Applicants must adhere to the following instructions.
- Insert your name in the header for each section of the application
- Application documents may be single or double-sided.
- **Type size**: Use 12 point Times New Roman or 11-point Arial as the minimum font size for the text of the application. A 10-point Times New Roman or 9-point Arial font type may be used for figures, legends, and tables.
- **Single-spaced text** is acceptable, and space between paragraphs is recommended.
- **Margins**: The margins of your text should be at least 0.5 inches all around, unless a form with different margins is supplied in the Application Templates.
- **Page numbering**:
  - **Cover Pages**: The first few pages of the application form are considered cover pages and are not numbered. The cover pages include the Signature Page, Contact Page, General Audience Summary and Structure Technical Abstract (if applicable).
  - **Proposal Sections**: The proposal sections are listed in the Table of Contents and must be numbered in the upper right hand corner. Each section should be numbered independently.
- **Appendix**: The appendix is now part of the electronic application.
3. RESUBMISSION OF AN APPLICATION

Applications that are not funded may generally be resubmitted twice except for Postdoctoral Fellowship applications which may only be resubmitted once. For the ACS MRA RFA only one resubmission is allowed for Pilot Award Proposals and no resubmissions are allowed for Multidisciplinary Team Award Proposals. Applicants are strongly encouraged to contact the appropriate Program Director prior to resubmission to discuss the previous reviews. Please follow these guidelines when resubmitting an application:

- Submit a complete application with a current date—electronic and paper copies.
- When resubmitted, the title of the project can be altered if necessary but should be appropriately marked as a first or second resubmission.
- Select the appropriate application number from the list of your prior submissions on proposalCENTRAL.
- The review committee code (e.g. TBE, CCE, CPPB, etc.) for the previous application must be provided where requested on the title page.
- A “Reply to Previous Review”, not to exceed 3 pages, should be placed where indicated in the Table of Contents of the Application Templates section. It should clearly and briefly address the points raised in the previous review and direct the reader to the specific sections of the text where revisions have been made. Revised portions of the text changed in response to the reviewers’ comments should be highlighted (e.g.: bold type, line in the margin, underlining, etc.). Copies of the reviewers’ previous critiques should be inserted immediately after the Reply to Previous Reviews as indicated in the Table of Contents.

4. CHANGES TO THE APPLICATION

Withdrawal of application: Please advise the Society promptly, in writing (or email), should you decide to withdraw your application for any reason. Your letter (or email) to the Program Director identified in the application acknowledgment letter should include your name, the application number, and the reason for withdrawal. If you are withdrawing because you have accepted funding from another organization, please let us know who will be funding your work.

Change of address: Notify the Society in writing (email) of any changes of address, email or phone number, following the submission of an application. Include your name and the application number. We also recommend that you update your information in proposalCENTRAL.

Change of institution: If you are an applicant for an ACS grant and change your institution, contact the Program Director identified in the acknowledgment email, who will determine whether your application can be reviewed.

5. EXPLANATION OF REQUIRED INFORMATION

Please note: Not all fields are required for all applications. See mechanism specific instructions

Project Title: The title should not exceed 75 characters in length (including spaces). Do not use abbreviations unless absolutely necessary.
**Principal Investigator/Applicant Information:** Some (or all) of the required information will have been automatically filled in from your profile. The information was provided when you initially registered with proposalCENTRAL and completed the Professional Profile. If any of this information is not current at the time of submission, you will need to update the Professional Profile before finalizing this section and submitting the final version of your application. Pay particular attention to your contact information as all notifications to you will be sent using this information. Please keep contact information up to date.

**Key Personnel:** In addition to the Principal Investigator, Key Personnel (e.g. Collaborators) are defined as individuals who will contribute to the scientific development or execution of the project in a substantive, measurable way whether or not salaries are requested. Typically, these individuals have doctoral or professional degrees although individuals at the masters or baccalaureate level can be included if their contribution meets the above definition of Key Personnel.

**Citizenship Status:** An appropriate selection must be made in the Professional Profile. Indicate your current citizenship status. You must provide your country of citizenship.

**Justification of Eligibility:** Applicants for American Cancer Society Extramural Grants must satisfy the eligibility requirements defined from each application type. Please indicate the month and year when your last degree was conferred, as well as the month and year of your first independent faculty (or equivalent) position where requested. If your case was evaluated by the American Cancer Society eligibility committee, include a copy of the letter the appendix, list it in the table of contents, and refer to it in the justification space provided.

**Justification of Designation “Priority Focus in Health Equity Research”**: Indicate on the title page of the application, “Health Equity” if the proposed study falls into the Priority Focus (Health Equity Research) in the Cancer Control and Prevention Research Program.

**Space:** If appropriate, indicate the approximate area of committed, independent research space provided by your institution to support your research program, as well as the name of the department chair responsible for verification of this research space. You must insert a value on the electronic form, even if you need to enter a 0 (zero).

**Institutional Official:** In addition to the name and address of the official authorized to sign for the institution, include an address for mailing checks. Institutional officials should sign the front page. Original signatures are not required; electronic signatures are acceptable.

**Department Chair:** Indicate name, department, and email address of the department chair. Department chairs should sign the front page to affirm the title of investigator and the committed resources.

**Primary Mentor:** Fill out all of the required fields for your mentor information.

**Additional Mentor (s):** Fill in this section with the same required information as for your primary mentor (when appropriate).
6. GENERAL AUDIENCE SUMMARY

The general audience summary is a very important part of the application and is intended to provide a clear overview of the proposed research to people who are not trained in the sciences but who are interested in cancer research. These include stakeholders, ACS staff members, potential donors and the general public. Stakeholders are individuals without formal scientific or medical training who have a strong personal interest in the prevention and control of cancer. They are included as full voting members of all peer review panels. The Stakeholder evaluation of the general audience summary becomes an important part of the overall review of the application by the peer review committee since their primary focus is on how the proposed work will be of value to cancer patients and their families.

ACS staff members who work with major donors also use these summaries to identify projects appropriate to the interests of donors who wish to support specific areas of cancer research. Furthermore, summaries of all grants made by the Society are made available to the general public. ACS staff members with responsibility for communicating ACS research to local media may also use the summaries to describe the research funded in a particular region of the country.

The general audience summary must not duplicate the structured technical abstract. It should be written in a way that makes the project easily understood by the audience described above without scientific jargon. See the Samples of General Audience Summaries in the Appendix for examples of a properly constructed summary. This summary should describe the background to the research, the questions to be asked, and the information to be obtained. The use of symbols and Greek characters should be avoided for the general audience; if they must be used, they have to be spelled out since they will not appear as characters in the text.

This form is limited to 3,000 characters, including spaces and will truncate at that point. Characters in excess of the limit are not transmitted with the application resulting in an incomplete summary. Failure to submit this correctly may result in the disqualification of your application.

If this application is funded, this description will become public information. Therefore, do not include proprietary/confidential information.

7. STRUCTURED TECHNICAL ABSTRACT

Please note: not all applications require a structured technical abstract.

The structured technical abstract is a clear and concise summary of the proposed research or scholarly project for general scientific audiences.

Please use the outline below. See the Appendix for an example of a structured technical abstract.

- **Background**: Provide a brief statement of the ideas and reasoning behind the proposed work.
- **Objective/hypothesis**: State the objective/hypothesis to be tested. Cite evidence or provide a rationale that supports it.
• **Specific aims**: Concisely state the specific aims of the study.

• **Study design**: Briefly describe the study design, emphasizing those elements you consider most relevant to assignment of the proposal for peer review.

*This form is limited to 3,000 characters, including spaces and will truncate at that point. Characters in excess of the limit are not transmitted with the application resulting in an incomplete summary. Please submit a complete Structured Technical Abstract within the character limit. **Failure to submit this correctly may result in the disqualification of your application.***

8. **PROJECT CODING**

*Please note: not all applications require project coding. Red asterisks indicate required fields. Submit this section electronically only.*

Donors frequently have an interest in funding particular types of cancer research. Thus, Areas of Research (Common Scientific Outline –CSO) and Types of Cancer must be selected for these summaries to be presented to donors for special funding opportunities. *See the Areas of Research in the Appendix for filling out the forms. Please note that in completing the Areas of Research section, appropriate items may also include those listed under Resources and Infrastructure Related to [specific area]. See the Appendix for specific terms and examples.*

The information requested is not part of the application used by the Peer Review Committee for scientific review, and should not be submitted with your paper copy. However, the information is important and assists the Society in communication to the public about its portfolio of applications and grants.

9. **ASSURANCES AND CERTIFICATION**

All activities involving human subjects or vertebrate animals must be approved by an appropriate institutional committee before the application will be funded by the American Cancer Society. Furthermore, compliance with current US Department of Health and Human Services and ACS guidelines for conflict of interest, recombinant DNA, and scientific misconduct is required. The assurances/certifications are made and verified by the signature of the institutional official signing the application.

*Vertebrate animals.* Every proposed research project involving vertebrate animals must be approved by an appropriate 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 will be funded by the American Cancer Society. Enter the date of the most recent IACUC approval in the space provided.

All research supported by the American Cancer Society (including subcontracted activities) involving vertebrate animals must be conducted at performance sites which are covered under an approved Animal Welfare Assurance. **It is the responsibility of the institution to immediately**
Human Subjects. All proposed research projects involving human subjects must be approved by the appropriate Institutional Review Board (IRB).

The institution must have received approval from 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) in the space provided. Copies of the DHHS policy and information regarding the assured status and assurance numbers of institutions may be obtained from OHRP. The definitions and further sources of clarification for all of these assurances are found in the NIH Grants Policy Statement (Revised 12/03), www.grants.nih.gov/grants/policy, or the NIH Office of Extramural Research.

If institutional review of human subjects (IRB certification) or vertebrate animal use (IACUC certification) has not been completed before the submission date of the application, you must indicate that the approval is pending on the certification page and give the appropriate institutional reference numbers if available. Certification of the institutional committee review, clearly labeled with the assigned American Cancer Society application number, must be received prior to activation of a grant for funding. Failure to supply the American Cancer Society with completed IRB and/or IACUC certifications prior to the approved start of funding will result in withholding of payments and may result in cancellation of funding.

Please note: applications for the Institutional Research Grant and certain Health Professional Training Grants do not require submission of IRB and IACUC certifications. Institutions must, however, be in compliance with the requirements noted above in order to use American Cancer Society grant funding for activities involving human subjects or vertebrate animals.

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

10. PI DATA SHEET

Submit this section electronically only.

The requested information is for statistical purposes only and is not part of the application used by the Peer Review Committee for scientific review. This section will not print with the cover pages and does not need to be submitted with your paper copy.

11. APPLICATION SUBMISSION AND REQUIRED SIGNATURES

Applications must be submitted in two formats: an electronic version and one paper copy.

A. SUBMISSION OF ELECTRONIC APPLICATION
• All application attachments including the appendix must be uploaded as .pdf documents. See proposalCENTRAL FAQ or contact support at 1-800-875-2562 if you need assistance.
• Validate the application on proposalCENTRAL. This is an essential step. An application that has not been validated cannot be submitted.
• Print application via proposalCENTRAL. To do so, choose “Print” on the menu and select “Print Signature Pages and Attached PDF Files”. **Do not print cover pages for an application that has not been validated.**
• If you wish, print and retain for your files the paper copies of the Demographic and Research Promotion Information and the Project Coding sections. **Do not** submit these sections in the paper copy of your application.
• Please collect all required signatures on the paper copy before submitting. Original signatures are not required; electronic signatures are acceptable. Please note, you do not upload the signed copy of the front page.; it is to be submitted with the paper copy.
• If any modifications were made during the signature process, make certain that all sections of the electronic version are revised to match the paper copy that is being submitted.
• If you have technical questions regarding the electronic application process, feel free to contact Altum at pcsupport@altum.com or 1-800-875-2562.
• Submission of the electronic version of application should be done after your institution has prepared the application for mailing. You have until 5:00 PM Eastern time on the deadline date to complete the electronic submission. Note that the appendix materials are now submitted electronically. Paper copies will no longer be provided to reviewers so any appendix materials must be uploaded to proposalCENTRAL to be considered during the review process.
• The electronic applications must be submitted at the proposalCENTRAL website by close of business (5:00 PM EST) on the specified deadline date. For the convenience of the applicant, a paper copy is due one day after submission of the electronic copy. **If the deadline falls on a weekend or holiday, applications will be accepted the following business day.**

Please note: You will **not** be able to make any changes to the forms or upload any modifications to the files after submission.

**B. ASSEMBLY AND SUBMISSION OF PAPER COPY**

The paper copy of the application must carry the signatures (front page) and contact information (second page) for

• The Applicant
• The Institutional Signing Official
• The Department Head

See program specific instructions for additional required signatures.

**A single paper copy of the application must be received by the American Cancer Society Corporate Center no later than 5:00 PM Eastern time on the next business day following the deadline date for the electronic submission.**
The paper copy must be assembled as described below. To reduce the chance of losing an application, we urge institutions to mail only one application per package. If more than one application is included in a package, provide a bright-colored cover sheet listing the applications enclosed and stating in ½ inch or larger lettering "MULTIPLE APPLICATIONS ENCLOSED."

The application should be held together with a rubber band or binder clips. Please do not staple. Send the complete application package to:

The American Cancer Society
Extramural Research Department
250 Williams Street NW, 6th Floor
Atlanta, GA 30303-1002
404-329-7558

B. PREPARING THE APPLICATION

Please note: as part of the application review, a member of the peer review committee must personally interview each applicant. The applicant will receive a detailed letter regarding arrangements for the interview. Following the interview, the applicant may submit supplemental materials at the recommendation of the interviewer. This addendum must be limited to information that is requested for clarification or that constitutes additional documentation for the candidate’s proposed program. No other supplemental materials will be accepted after the deadline unless requested by staff for administrative purposes.

COVER PAGES

The application cover pages include the Signature page with Assurances and Certifications, Contact page, General Audience Summary and Structured Technical Abstract. Most of the information that is collected online at proposalCENTRAL appears on the cover pages. This includes program eligibility information, including last year of relevant training. This information is required to determine eligibility for a Cancer Control Career Development Award for Primary Care Physicians. If you have received a letter from the American Cancer Society Eligibility Committee, manually indicate this on the cover page in the Program Eligibility Information section and attach the letter in the Appendices.

IMPORTANT: the applicant’s mailing address must appear in the box with the headings “APPLICANT CURRENT INSTITUTION” and “MAILING ADDRESS.” This is drawn from the information provided in the Professional Profile section of proposalCENTRAL.

Additional Signatures Both the Department Head and the Mentor(s) are required to sign in the section “Additional Signatures.”

1. APPLICATION TEMPLATES

An application consists of several sections that must be uploaded before the online 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 using word processing software. 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.*

2. **TABLE OF CONTENTS (PAGE 1.1)**

The Table of Contents is pre-numbered. Complete the Table by adding the Appendix information. **Note: there is no overall page limit for the completed application.**

3. **DETAILED BUDGET AND JUSTIFICATION OF BUDGET (PAGE 2.1)**

Provide a budget for the period of the award, detailing in the budget justification the proposed use of the funds provided by the CCCDA [see Policies]. Justify the need for the items listed.

A. **Personnel.** Names and positions of all personnel must be individually listed and the percentage of time to be devoted to the project by each person should be noted, even when salary is not requested. If the individual has not been selected, please list as “vacancy.”

Personnel may receive salary support up to a maximum that equals the NCI salary cap, prorated according to their percent effort on the project. 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. **Permanent Equipment.** Defined as all 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.

C. **Supplies.** Group into major categories (survey materials, computer software, etc.)

D. **Travel.** 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 expenditures allowed include: publication costs, 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 costs and provide a categorical breakdown of costs using duplicate copies of the grant application Budget and Justification of Budget pages. Subcontracts required to complete the research project may be with public or private institutions provided that they are not in violation of 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; and use of any
subcontractor outside of the United States must be approved in writing by ACS prior to the performance of any work funded by the ACS grant.

G. **Indirect Costs.** No portion of the CCCDA may be used for indirect costs.

H. **Total Amount Requested.** Enter the sum of all years of requested support.

4. **OTHER SUPPORT (PAGE 3.1)**

It is the policy of the American Cancer Society not to fund individuals who have received a similar award from another agency or projects that are supported wholly by another agency. The Peer Review Committee will make the final decision regarding any questions of eligibility. The only exceptions are funds provided by the host institution as “start-up” support. **Failure to provide complete information will delay the review of your application.**

The template titled *Other Support* is to be used to list all support that you have received to date and all pending support. Include any grants that list the candidate as a participant or principal investigator. Other Support includes both intramural and extramural sources (institutional, for-profit, and not-for-profit, including other grants from the American Cancer Society). Use continuation pages as necessary.

A. In a section labeled **PAST SUPPORT,** list all past support of the applicant to assure that this grant does not duplicate a previous, similar training grant. Give the source of funds, grant number, title of project, time period covered by the grant, the amount of direct cost support for current year and total grant period, and percent effort. An explanatory sentence should also be included, if it is necessary to clarify the differences between the present application to the American Cancer Society and other funded grants.

B. In a section labeled **CURRENT SUPPORT,** provide the following:

- List the amount(s) and source(s) of your proposed salary beginning July 1 for the first year of the grant, if you receive American Cancer Society funding.

- Describe any in-kind support to be provided by your institution if you receive this award.

- List all active awards, providing the source of funds, grant number, title of project, direct costs, period of time covered by the grant, the amount of support for current year (for active grants) and total grant period, and percent effort. An explanatory sentence should also be included, if it is necessary to clarify the differences between the present application to the American Cancer Society and other funded grants.

C. In a section labeled **PENDING SUPPORT,** list all grants and awards you have applied for that are currently pending. Note for each grant the institution/agency, application number (if known), title, amount requested, period of the award, and percent effort. If this application to the American Cancer Society is similar to a pending application at another granting agency, indicate whether the proposals are to be considered on an "either/or" basis. For pending
support that is “either/or” with the present application to the American Cancer Society, only one award can be accepted if both are approved for funding. An explanatory sentence should also be included, if it is necessary to clarify the differences between the present application to the Society and any pending application. Outline in this section applications that are planned for the period between submission of the present application and the date an award would begin. Please keep the Program Director current on the status of all pending applications. The Peer Review Committee will make the final decision regarding any questions of overlap or eligibility.

5. REPLY TO PREVIOUS REVIEW (resubmissions only) (PAGE 4.1)

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

IF THE APPLICATION IS A RESUBMISSION, it must be identified as such on the cover page. This section should clearly and briefly address the points raised in the previous reviews and direct the reader to the specific sections where text revisions have been made. Do not exceed three pages. Text changed in response to reviewers’ comments should be identifiable in the revised application (e.g. bold type, line in the margin, underlining, etc).

6. PREVIOUS CRITIQUES (resubmissions only)

Electronic copies of the critiques for your previous submission can be downloaded from your “Submitted” page on proposalCENTRAL. Select the link to “View Review Info” then “View Summary Statement” and save the document to your computer. Upload the document to your new application with the other proposal sections.

7. PROGRAM PLAN PART I – CANDIDATE (PAGE 5.1)

(To be completed by the candidate)
Detailed below are the instructions for completing the individual parts of the Program Plan section. The total length of these two sections (Parts I and II) must not exceed 20 pages. This page limit does not include the references, which should come at the end of the cancer control project description. Proposals should be realistic in terms of work to be accomplished in the period of time for which support is requested. Although it is permissible to submit applications on an "either/or" basis with other agencies, proposals should be adjusted to fit the Society's term and budget constraints. Failure to conform to the guidelines on type size, page length, or project scope will result in the application being returned to the investigator without review.

A complete curriculum vitae is required for this application. Note: publications should be categorized as peer reviewed original articles, reviews, abstracts, letters to the editor, etc., and the applicant should indicate which are published, accepted or submitted. Please upload your document where indicated on proposalCENTRAL.
Complete the following sections of the application by providing the information requested below on the template entitled “Program Plan Part I - Candidate” and using continuation pages as necessary.

**BACKGROUND AND EXPERIENCE**

Please describe the following:

- Experiences and activities that demonstrate a commitment to a career in primary care and cancer control, including prior and current activities that relate to your career goals
- Past clinical training and experience
- Past teaching experience and activities
- Any other relevant educational, training or developmental activities
- Past research experience

If there are consistent themes or interests that have guided your work to date, please share these; if your work and career have changed direction, the changes and reasons should be provided.

**CAREER GOALS**

Explain how the CCCDA will support your career development as a primary care physician and cancer control expert. A proposed plan for knowledge and skill building in primary care practice, education, and research activities related to cancer control must be outlined. Please note that the activities described should be integrated and the relationship of each to the overall plan should be clear to the reviewers. The details for the individualized three-year program should be provided in the TRAINING PLAN section.

**CAREER DEVELOPMENT AND TRAINING PLAN**

The proposed CCCDA program must provide opportunities for the applicant to:

- enhance his/her existing knowledge and
- acquire new or enhance existing clinical, teaching and research skills in cancer control.

Outline specific educational and faculty development objectives and describe the activities, e.g., coursework, seminars, workshops, self-directed learning, etc., planned to accomplish them. Provide a timeline and a plan to evaluate the progress of the candidate toward these objectives.

**CLINICAL AND TEACHING ACTIVITIES**

This program must provide opportunities for the applicant to participate in clinical and teaching activities focused on cancer prevention and control that are consistent with the candidate’s career goals.

A detailed description of both current and planned clinical and teaching activities proposed for each year of the CCCDA award period must be included. Clinical activities may include, but are not limited to patient clinics (inpatient, ambulatory, community), consultation, multidisciplinary clinical meetings, quality assurance activities, etc. Teaching activities may include, but are not limited to formal lectures or courses, divisional or institutional grand rounds, conference workshops and seminars, patient support groups and community education sessions.
CANCER CONTROL PROJECT

Provide a detailed description of the cancer control project(s) planned for the award period. Appropriate research or scholarly topics are described in the Policies, Section 21.B.

- If the applicant proposes a hypothesis-based research project, this section must include the project(s) title, the hypothesis(es), the significance of the proposed research, specific aims, research design (including the timeline, methodology, study population, statistical calculations, etc.), and references.

- If a scholarly project (such as an educational initiative) is proposed, this section must include the project(s) title, objectives and outcomes for the project, background information, a plan to develop and implement the intervention, and a plan for a rigorous evaluation of the intervention.

8. PROGRAM PLAN PART II – SPONSOR/MENTOR (PAGE 6.1)

*(To be completed by the sponsor/mentor(s) who will supervise and guide the candidate in the program.)*

PROGRAM GOALS

Provide a statement of the overall goals of the program proposed for the candidate and the department’s long-term goals for the applicant’s career. Using the table provided in the template, describe how the candidate will apportion his/her time over the three-year period of the award, noting any teaching appointments, clinical responsibilities, participation in screening clinics or tumor boards, etc.

Explain your role in the program proposed for the candidate, and the extent of your involvement in the development and writing of this grant proposal. If an additional mentor(s) is involved in the candidate’s training, describe this person’s role as well. Outline your plan to monitor the progress of the candidate and how this will occur (format and frequency of meetings, who else will participate, etc.). Fully describe your current professional responsibilities and activities, including the mentoring or training of other faculty or students and explain how your time will be apportioned over the period of the grant in order to support the candidate’s program. Document your background and experience in training and mentoring. Note: it is permissible for two candidates to be sponsored by the same mentor, but the mentor must explain how his/her time will be apportioned if both applicants are awarded.

Advisors playing a key role should provide a letter of support to demonstrate commitment of time and expertise to the applicant and the proposed CCCDA program.

INSTITUTIONAL RESOURCES

Describe facilities, resources, equipment, existing cancer control programs, personnel and relationship between the candidate’s department and other appropriate faculty and/or departments. Provide relevant patient statistics that will aid the review committee in evaluating patient load. State whether there is a tumor board and/or cancer registry.
PROPOSED SUPPORT TO CANDIDATE
Describe specific support to be provided to the candidate by the institution, for example: space, research assistants, research budget, epidemiology resources, office space, funds to be used to attend conferences, seminars, etc. This support may include in-kind support for some of the candidate’s time and effort to commit to objectives of the award.

IMPACT OF THE AWARD ON THE CANDIDATE'S CAREER DEVELOPMENT
Describe how these funds, if awarded, will be used to advance the candidate's academic career in cancer control. Possible benefits include (but are not limited to):

- A documentable decrease in the clinical and/or administrative responsibilities of the candidate due to this award. Explain clearly how funding from this award would allow the candidate to spend additional time involved in activities described in this application.

- A documentable addition of resources made available to the candidate due to this award. Itemize additional resources provided to the candidate if they receive this award.

- Any additional advanced training that will be made possible by the funds associated with this award.

9. BIOGRAPHICAL SKETCH FOR SPONSOR/MENTOR(S) (PAGE 7.1)
The application must include a biographical sketch for the candidate's sponsor/mentor. If one or more additional mentors are named to guide the candidate in a specific aspect of his/her program, e.g., the research project, a separate biographical sketch must be submitted for each individual. Use the form entitled “Biographical Sketch” and adhere to the format provided. The form provided may be duplicated as needed, but must not exceed five pages. Only the PHS biosketch form will be accepted instead of the form provided online, but must include the primary care certification of the senior mentor.

Education / Training. Complete the educational block at the top of the page by providing the information requested. Include all degrees awarded; if awarded a PhD, provide the name of the mentor. Postdoctoral training should include residency, internships and any fellowships. For fellowships, list title of position, mentor's name, and exact dates of training. Complete sections A, B, and C.

Certifications. List professional certifications and credentials with dates.

Positions and Honors. List in chronological order previous positions, concluding with your present position. State duration, title, and institution. List any honors awarded by academic or professional societies. Include membership on national advisory committees.

Publications. Give complete references for all peer reviewed publications, including titles; begin each citation on a new line. If the number of publications is extensive, you may give a partial listing; indicate total number of publications (excluding abstracts, non-peer reviewed articles or book chapters).
10. LETTERS OF RECOMMENDATION

(Letters are submitted electronically.)

- Four letters of recommendation, including one from the candidate's sponsor/mentor and if relevant, the additional sponsor/mentor, must be submitted with this application. Letters should clearly show commitment to the candidate and reinforce the information provided in Program Plan Part II.

- Request the remaining recommendations from individuals other than the proposed mentor(s), who can and will critically appraise your qualifications.

- The application must also include the letter of support from the local office of the American Cancer Society.

The letters will need to be provided electronically on proposalCENTRAL. Provide the names and email addresses of the persons you ask to provide letters of recommendation in the Letter of Recommendations section of the online application. This allows proposalCENTRAL to email those persons a link to the website and give them access to the site to upload their letters. There are specific instructions on the site for you and your recommenders. Your application cannot be submitted until these letters have been provided on proposalCENTRAL.

Note: Letters of recommendation can be reused in a resubmission if the application is resubmitted within a calendar year of the initial proposal.

11. APPLICATION APPENDIX

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:

- Evidence of Permanent Resident status

- Letters of support from key advisors, consultants, or collaborators

- Transcripts

- Letter from ACS Eligibility Committee confirming eligibility

- Recent reprints or preprints

- CDs/DVDs, mp4 Files

- Clinical Protocols

It is not necessary to number the pages of the appendix, but please list by categories (i.e., reprints, preprints, etc.) in the Table of Contents of the application.
APPENDIX A: CLASSIFICATION CATEGORIES - AREAS OF RESEARCH

The areas of research are based on seven broad categories called the Common Scientific Outline (CSO) developed by the International Cancer Research Partnership (ICRP):

1. Biology
2. Etiology
3. Prevention
4. Early Detection, Diagnosis and Prognosis
5. Treatment
6. Cancer Control, Survivorship and Outcomes Research

Applicants are asked to select from the following codes:

<table>
<thead>
<tr>
<th>1 – BIOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research included in this category looks at the biology of how cancer starts and progresses as well as normal biology relevant to these processes.</td>
</tr>
</tbody>
</table>

1.1 Normal Functioning

*Examples of science that would fit:*
- Developmental biology (from conception to adulthood) and the biology of aging
- Normal functioning of genes, including their identification and expression, and the normal function of gene products, such as hormones and growth factors
- Normal formation of the extracellular matrix
- Normal cell-to-cell interactions
- Normal functioning of apoptotic pathways
- Characterization of pluripotent progenitor cells (e.g., normal stem cells)

1.2 Cancer Initiation: Alterations in Chromosomes

*Examples of science that would fit:*
- Abnormal chromosome number
- Aberration in chromosomes and genes (e.g., in chronic myelogenous leukemia)
- Damage to chromosomes and mutation in genes
- Failures in DNA repair
- Aberrant gene expression
- Epigenetics
- Genes and proteins involved in aberrant cell cycles

1.3 Cancer Initiation: Oncogenes and Tumor Suppressor Genes

Examples of science that would fit:
- Genes and signals involved in growth stimulation or repression, including oncogenes (Ras, etc.), and tumor suppressor genes (p53, etc.)
- Effects of hormones and growth factors and their receptors such as estrogens, androgens, TGF-beta, GM-CSF, etc.
- Research into the biology of stem cell tumour initiation

1.4 Cancer Progression and Metastasis

*Examples of science that would fit:*

- Latency, promotion, and regression
- Expansion of malignant cells
- Interaction of malignant cells with the immune system or extracellular matrix
- Cell mobility, including detachment, motility, and migration in the circulation
- Invasion
- Malignant cells in the circulation, including penetration of the vascular system and extravasation
- Systemic and cellular effects of malignancy
- Tumor angiogenesis and growth of metastases
- Role of hormone or growth factor dependence/independence in cancer progression
- Research into cancer stem cells supporting or maintaining cancer progression

1.5 Resources and Infrastructure

*Examples of science that would fit:*

- Informatics and informatics networks
- Specimen resources
- Epidemiological resources pertaining to biology
- Reagents, chemical standards
- Development and characterization of new model systems for biology, distribution of models to scientific community or research into novel ways of applying model systems, including but not limited to computer-simulation systems, software development, in vitro/cell culture models, organ/tissue models or animal model systems. Guidance note: this should only be used where the focus of the award is creating a model. If it is only a tool or a methodology, code to the research instead.
- Education and training of investigators at all levels (including clinicians and other health professionals), such as participation in training workshops, conferences, advanced research technique courses, and Master's course attendance. This does not include longer-term research-based training, such as Ph.D. or post-doctoral fellowships.

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2 – ETIOLOGY

Research included in this category aims to identify the causes or origins of cancer - genetic, environmental, and lifestyle, and the interactions between these factors.

2.1 Exogenous Factors in the Origin and Cause of Cancer

*Examples of science that would fit:*

...
• Research into the role of lifestyle factors such as smoking, chewing tobacco, alcohol consumption, parity, diet, sunbathing, and exercise in the origin and cause of cancer or increasing the risk of cancer
• Research into the social determinants of cancer such as crime, housing dilapidation, neighbourhood level socioeconomic status and services and their relationship to cancer incidence and mortality etc.
• Studies on the effect(s) of nutrients or nutritional status on cancer incidence
• Development, characterization, validation, and use of dietary/nutritional assessment instruments in epidemiological studies and to evaluate cancer risk
• Environmental and occupational exposures such as radiation, second-hand smoke, radon, asbestos, organic vapors, pesticides, and other chemical or physical agents
• Infectious agents associated with cancer etiology, including viruses (Human Papilloma Virus-HPV, etc.) and bacteria (helicobacter pylori, etc.)
• Viral oncogenes and viral regulatory genes associated with cancer causation
• Contextual Factors Contributing to Cancer Incidence (e.g., race/ethnicity, socioeconomic status, neighborhood factors, community factors, built environment).

2.2 Endogenous Factors in the Origin and Cause of Cancer

Examples of science that would fit:
• Free radicals such as superoxide and hydroxide radicals
• Identification /confirmation of genes suspected of being mechanistically involved in familial cancer syndromes; for example, BRCA1, Ataxia Telangiectasia, and APC
• Identification/confirmation of genes suspected or known to be involved in "sporadic" cancer events; for example, polymorphisms and/or mutations that may affect carcinogen metabolism (e.g., CYP, NAT, glutathione transferase, etc.)
• Investigating a role for stem cells in the etiology of tumours

2.3 Interactions of Genes and/or Genetic Polymorphisms with Exogenous and/or Endogenous Factors

Examples of science that would fit:
• Gene-environment interactions
• Interactions of genes with lifestyle factors, environmental, and/or occupational exposures such as variations in carcinogen metabolism associated with genetic polymorphisms
• Interactions of genes and endogenous factors such as DNA repair deficiencies and endogenous DNA damaging agents such as oxygen radicals or exogenous radiation exposure

2.4 Resources and Infrastructure Related to Etiology

Examples of science that would fit:
• Informatics and informatics networks; for example, patient databanks
• Specimen resources (serum, tissue, etc.)
- Reagents and chemical standards
- Epidemiological resources pertaining to etiology
- Statistical methodology or biostatistical methods
- Centers, consortia, and/or networks
- Development, characterization and validation of new model systems for etiology, distribution of models to the scientific community or research into novel ways of applying model systems, including but not limited to computer-simulation systems, software development, in vitro/cell culture models, organ/tissue models or animal model systems. Guidance note: this should only be used where the focus of the award is creating a model. If it is only a tool or a methodology, code to the research instead.
- Education and training of investigators at all levels (including clinicians and other health professionals), such as participation in training workshops, conferences, advanced research technique courses, and Master's course attendance. This does not include longer term research based training, such as Ph.D. or post-doctoral fellowships.

3 – PREVENTION
Research included in this category looks at identifying individual and population-based primary prevention interventions, which reduce cancer risk by reducing exposure to cancer risks and increasing protective factors.

3.1 Interventions to Prevent Cancer: Personal Behaviors (Non-Dietary) that Affect Cancer Risk
Examples of science that would fit:
- Research on determinants of personal behaviors, such as physical activity, sun exposure, and tobacco use, known to affect cancer risk and interventions (including educational and behavioral interventions directed at individuals as well as population-based interventions including social marketing campaigns, environmental supports, and regulatory, policy and legislative changes) to change determinants
- Directed education to specified populations of patients, health care providers, and at-risk groups about cancer risk and prevention and relevant interventions with the intent of promoting increased awareness and behavioural change. This includes communication of lifestyle models that reduce cancer risk, such as communicating smoking and tobacco cessation interventions

3.2 Dietary Interventions to Reduce Cancer Risk and Nutritional Science in Cancer Prevention
Examples of science that would fit:
- Quantification of nutrients, micronutrients, and purified nutritional compounds in cancer prevention studies
- Development, characterization, validation, and use of dietary/nutritional assessment instruments to evaluate cancer prevention interventions
• Research on determinants of dietary behavior and interventions to change diet (including educational and behavioral interventions directed at individuals as well as population-based interventions including social marketing campaigns, environmental supports, and regulatory and legislative changes) to change diet
• Education of patients, health care providers, at-risk populations, and the general population about cancer risk and diet
• Communicating cancer risk of diet to underserved populations, at-risk populations, and the general public
• Communication of nutritional interventions that reduce cancer risk"

3.3 Chemoprevention
Examples of science that would fit:
• Chemopreventive agents and their discovery, mechanism of action, development, testing in model systems, and clinical testing

3.4 Vaccines
Examples of science that would fit:
• Vaccines for prevention, their discovery, mechanism of action, development, testing in model systems, and clinical testing (e.g., HPV vaccines)
• Guidance note: only preventive/prophylactic vaccine research should be included here. Vaccines for the treatment of cancer should be coded to 5.3 or 5.4, depending on the phase of development.

3.5 Complementary and Alternative Prevention Approaches
Examples of science that would fit:
• Discovery, development, and testing of complementary/alternative medicine (CAM) approaches or other primary prevention interventions that are not widely used in conventional medicine or are being applied in different ways as compared to conventional medical uses
• Mind and body medicine (e.g., meditation, acupuncture, hypnotherapy), manipulative and body-based practices (e.g., spinal manipulation, massage therapy), and other practices (e.g., light therapy, traditional healing) used as a preventive measure.

3.6 Resources and Infrastructure Related to Prevention
Examples of science that would fit:
• Informatics and informatics networks; for example, patient databanks
• Specimen resources (serum, tissue, etc.)
• Epidemiological resources pertaining to prevention
• Clinical trials infrastructure
• Statistical methodology or biostatistical methods
• Centers, consortia, and/or networks
• Development and characterization of new model systems for prevention, distribution of models to scientific community or research into novel ways of applying model systems, including but not limited to computer-simulation systems, software development, in vitro/cell culture models, organ/tissue models or animal model systems. Guidance note: this should only be used where the focus of the award is creating a model. If it is only a tool or a methodology, code to the research instead.

• Education and training of investigators at all levels (including clinicians and other health professionals), such as participation in training workshops, conferences, advanced research technique courses, and Master's course attendance. This does not include longer term research based training, such as Ph.D. or post-doctoral fellowships.

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4 – EARLY DETECTION, DIAGNOSIS, AND PROGNOSIS
Research included in this category focuses on identifying and testing cancer markers and imaging methods that are helpful in detecting and/or diagnosing cancer as well as predicting the outcome or chance of recurrence or to support treatment decision making in stratified/personalised medicine.

4.1 Technology Development and/or Marker Discovery
*Examples of science that would fit:*
  • Discovery or identification and characterization of markers (e.g., proteins, genes, epigenetic), and/or technologies (such as fluorescence, nanotechnology, etc.) that are potential candidates for use in cancer detection, staging, diagnosis, and/or prognosis
  • Use of proteomics, genomics, expression assays, or other technologies in the discovery or identification of markers
  • Defining molecular signatures of cancer cells, including cancer stem cells (e.g., for the purposes of diagnosis/prognosis and to enable treatment decision planning in personalized/stratified/precision medicine)

4.2 Technology and/or Marker Evaluation With Respect to Fundamental Parameters of Method
*Examples of science that would fit:*
  • Development, refinement, and preliminary evaluation (e.g., animal trials, preclinical, and Phase I human trials) of identified markers or technologies such as genetic/protein biomarkers (prospective or retrospective) or imaging methods (optical probes, PET, MRI, etc.)
  • Preliminary evaluation with respect to laboratory sensitivity, laboratory specificity, reproducibility, and accuracy
  • Retrospective studies of existing sample collections and evaluation of markers in ancillary studies
  • Research into mechanisms assessing tumor response to therapy at a molecular or cellular level
4.3 Technology and/or Marker Testing in a Clinical Setting

*Examples of science that would fit:*

- Evaluation of clinical sensitivity, clinical specificity, and predictive value (Phase II or III clinical trials)
- Quality assurance and quality control
- Inter- and intra-laboratory reproducibility
- Testing of the method with respect to effects on morbidity and/or mortality
- Study of screening methods, including compliance, acceptability to potential screenees, and receiver-operator characteristics. Includes education, communication, behavioral and complementary/alternative approaches to improve compliance, acceptability or to reduce anxiety/discomfort.
- Research into improvements in techniques to assess clinical response to therapy

4.4 Resources and Infrastructure Related to Detection, Diagnosis, or Prognosis

*Examples of science that would fit:*

- Informatics and informatics networks; for example, patient databanks
- Specimen resources (serum, tissue, images, etc.)
- Clinical trials infrastructure
- Epidemiological resources pertaining to risk assessment, detection, diagnosis, or prognosis
- Statistical methodology or biostatistical methods
- Centers, consortia, and/or networks
- Development, characterization and validation of new model systems for detection, diagnosis or prognosis, distribution of models to the scientific community or research into novel ways of applying model systems, including but not limited to computer-simulation systems, software development, in vitro/cell culture models, organ/tissue models or animal model systems. Guidance note: this should only be used where the focus of the award is creating a model. If it is only a tool or a methodology, code to the research instead.
- Education and training of investigators at all levels (including clinicians and other health professionals), such as participation in training workshops, conferences, advanced research technique courses, and Master's course attendance. This does not include longer term research based training, such as Ph.D. or post-doctoral fellowships.

5 – TREATMENT

Research included in this category focuses on identifying and testing treatments administered locally (such as radiotherapy and surgery) and systemically (treatments like chemotherapy which are administered throughout the body) as well as non-traditional (complementary/alternative) treatments (such as supplements, herbs). Research into the prevention of recurrence and treatment of metastases are also included here.

5.1 Localized Therapies - Discovery and Development
Examples of science that would fit:

- Discovery and development of treatments administered locally that target the organ and/or neighboring tissue directly, including but not limited to surgical interventions, cryotherapy, local/regional hyperthermia, high-intensity, focused ultrasound, radiotherapy, and brachytherapy.
- Therapies with a component administered systemically but that act locally (e.g., photodynamic therapy, radioimmunotherapy and radiosensitizers).
- Development of methods of localized drug delivery.
- Research into the development of localized therapies to prevent recurrence.
- Guidance note: localized therapies are considered to be localized when the site of action is the same as the site of administration.

5.2 Localized Therapies - Clinical Applications

Examples of science that would fit:

- Clinical testing and application of treatments administered locally that target the organ and/or neighboring tissue directly, including but not limited to surgical interventions, cryotherapy, local/regional hyperthermia, radiotherapy, and brachytherapy.
- Clinical testing and application of therapies with a component administered systemically but that act locally (e.g., photodynamic therapy and radiosensitizers).
- Phase I, II, or III clinical trials of promising therapies that are administered locally.
- Side effects, toxicity, and pharmacodynamics.
- Clinical testing of localized therapies to prevent recurrence and prevent and treat metastases.
- Guidance note: localized therapies are considered to be localized when the site of action is the same as the site of administration.

5.3 Systemic Therapies - Discovery and Development

Examples of science that would fit:

- Discovery and development of treatments administered systemically such as cytotoxic or hormonal agents, novel systemic therapies such as immunologically directed therapies (treatment vaccines, antibodies), gene therapy, angiogenesis inhibitors, apoptosis inhibitors, whole body hyperthermia, bone marrow/stem cell transplantation, differentiating agents, adjuvant and neo-adjuvant treatments.
- Identifying mechanisms of action of existing cancer drugs and novel drug targets, including cancer stem cells for the purposes of treatment/identifying drug targets.
- Drug discovery and development, including drug metabolism, pharmacokinetics, pharmacodynamics, combinatorial chemical synthesis, drug screening, development of high-throughput assays, and testing in model systems, including that which may aid treatment planning in stratified/personalised medicine.
- Investigating the molecular mechanisms of drug resistance (including the role of cancer stem cells) and pre-clinical evaluation of therapies to circumvent resistance.
• Development of methods of drug delivery
• Research into the development of systemic therapies to prevent recurrence

5.4 Systemic Therapies - Clinical Applications
*Examples of science that would fit:*
• Clinical testing and application of treatments administered systemically such as cytotoxic or hormonal agents, novel systemic therapies such as immunologically directed therapies (treatment vaccines, antibodies), gene therapy, angiogenesis inhibitors, apoptosis inhibitors, whole body hyperthermia, bone marrow/stem cell transplantation, and differentiating agents
• Phase I, II, or III clinical trials of promising therapies administered systemically
• Side effects, toxicity, and pharmacodynamics
• Clinical testing of systemic therapies to prevent recurrence and prevent and treat metastases

5.5 Combinations of Localized and Systemic Therapies
*Examples of science that would fit:*
• Development and testing of combined local and systemic approaches to treatment (e.g., radiotherapy and chemotherapy, or surgery and chemotherapy)
• Clinical application of combined approaches to treatment such as systemic cytotoxic therapy and radiation therapy
• Development and clinical application of combined localized and systemic therapies to prevent recurrence and prevent and treat metastases

5.6 Complementary and Alternative Treatment Approaches
*Examples of science that would fit:*
• Discovery, development, and clinical application of complementary/alternative medicine (CAM) treatment approaches such as diet, herbs, supplements, natural substances, or other interventions that are not widely used in conventional medicine or are being applied in different ways as compared to conventional medical uses
• Complementary/alternative or non-pharmaceutical approaches to prevent recurrence and prevent and treat metastases

5.7 Resources and Infrastructure Related to Treatment and the Prevention of Recurrence
*Examples of science that would fit:*
• Informatics and informatics networks; for example, clinical trials networks and databanks
• Mathematical and computer simulations
• Specimen resources (serum, tissue, etc.)
• Clinical trial groups
• Epidemiological resources pertaining to treatment
• Statistical methodology or biostatistical methods
• Drugs and reagents for distribution and drug screening infrastructures
• Centers, consortia, and/or networks
• Development and characterization of new model systems for treatment, distribution of models to scientific community or research into novel ways of applying model systems, including but not limited to computer-simulation systems, software development, in vitro/cell culture models, organ/tissue models or animal model systems. Guidance note: this should only be used where the focus of the award is creating a model. If it is only a tool or a methodology, code to the research instead.
• Reviews/meta-analyses of clinical effectiveness of therapeutics/treatments
• Education and training of investigators at all levels (including clinicians and other health professionals), such as participation in training workshops, conferences, advanced research technique courses, and Master’s course attendance. This does not include longer term research based training, such as Ph.D. or post-doctoral fellowships.

6 - CANCER CONTROL, SURVIVORSHIP, AND OUTCOMES RESEARCH
Research included in this category includes a broad range of areas: patient care and pain management; tracking cancer cases in the population; beliefs and attitudes that affect behavior regarding cancer control; ethics; education and communication approaches for patients, family/caregivers, and health care professionals; supportive and end-of-life care; and health care delivery in terms of quality and cost effectiveness.

6.1 Patient Care and Survivorship Issues
Examples of science that would fit:
• Research into patient centred outcomes
• Quality of life
• Pain management
• Psychological impacts of cancer survivorship
• Rehabilitation, including reconstruction and replacement
• Economic sequelae, including research on employment, return to work, and vocational/educational impacts on survivors and their families/caregivers
• Reproductive issues
• Long-term issues (morbidity, health status, social and psychological pathways)
• Symptom management, including nausea, vomiting, lymphedema, neuropathies, etc.
• Prevention and management of long-term treatment-related toxicities and sequelae, including symptom management (e.g., physical activity or other interventions), prevention of mucosities, prevention of cardiotoxocities, opportunistic infections, etc.
• Psychological, educational or complementary/alternative (e.g., hypnotherapy, relaxation, transcendental meditation, imagery, spiritual healing, massage, biofeedback, herbs, spinal manipulation, yoga, acupuncture) interventions/approaches to promote behaviors that lessen treatment-related morbidity and promote psychological adjustment to the diagnosis of cancer and to treatment effects
• Burdens of cancer on family members/caregivers and interventions to assist family members/caregivers
• Educational interventions to promote self-care and symptom management
• Research into peer support, self-help, and other support groups
• Behavioral factors in treatment compliance

6.2 Surveillance

Examples of science that would fit:
• Epidemiology and end results reporting (e.g., SEER)
• Registries that track incidence, morbidity, co-morbidities/symptoms, long-term effects and/or mortality related to cancer
• Surveillance of established cancer risk factors in populations such as diet, body weight, physical activity, sun exposure, and tobacco use
• Analysis of variations in established cancer risk factor exposure in populations by demographic, geographic, economic, or other factors
• Trends in use of interventional strategies in populations (e.g., geographic variation)

6.3 Population-based Behavioral Factors

Examples of science that would fit:
• Research into populations’ attitudes and belief systems (including cultural beliefs) and their influence on behaviors related to cancer control, outcomes and treatment. For example, how populations’ beliefs can affect compliance/interaction with all aspects of the health care/service provision

6.4 Health Services, Economic and Health Policy Analyses

Examples of science that would fit:
• Development and testing of health service delivery methods
• Interventions to increase the quality of health care delivery
• Impact of organizational, social, and cultural factors on access to care and quality of care, including studies on variations or inequalities in access among racial, ethnic, geographical or socio-economic groups
• Studies of providers such as geographical or care-setting variations in outcomes
• Effect of reimbursement and/or insurance on cancer control, outcomes, and survivorship support
• Health services research, including health policy and practice
• Analysis of health service provision, including the interaction of primary and secondary care
• Analyses of the cost effectiveness of methods used in cancer prevention, detection, diagnosis, prognosis, treatment, and survivor care/support

6.5 Education and Communication Research
Examples of science that would fit:
- Development of generic health provider-patient communication tools and methods (e.g., telemedicine/health)
- Tailoring educational approaches or communication to different populations (e.g., social, racial, geographical, or linguistic groups)
- Research into new educational and communication methods and approaches, including special approaches and considerations for underserved and at-risk populations
- Research on new methods and strategies to disseminate cancer information/innovation to healthcare providers (e.g., web-based information, telemedicine, smartphone apps, etc.) and the effectiveness of these approaches
- Research on new communication processes and/or media and information technologies within the health care system and the effectiveness of these approaches
- Media studies focused on the nature and ways in which information on cancer and cancer research findings are communicated to the general public
- Education, information, and assessment systems for the general public, primary care professionals, or policy makers
- Research into barriers to successful health communication

6.6 End-of-Life Care
Examples of science that would fit:
- Hospice/end-of-life patient care focused on managing pain and other symptoms (e.g., respiratory distress, delirium) and the provision of psychological, social, spiritual and practical support through either conventional or complementary/alternative interventions/approaches throughout the last phase of life and into bereavement
- Quality of life and quality of death for terminally-ill patients
- Provision of psychological, social, spiritual and practical support to families/caregivers through either conventional or complementary/alternative interventions/approaches
- Research into the delivery of hospice care

6.7 Research on Ethics and Confidentiality
Examples of science that would fit:
- Informed consent modeling/framing and development
- Quality of Institutional Review Boards (IRBs)
- Protecting patient confidentiality and privacy
- Research ethics
- Research on publication bias within the cancer research field

6.8 – Historical code [no longer used]

6.9 Resources and Infrastructure Related to Cancer Control, Survivorship, and Outcomes Research
Examples of science that would fit:
- Informatics and informatics networks
- Clinical trial groups related to cancer control, survivorship, and outcomes research
- Epidemiological resources pertaining to cancer control, survivorship, and outcomes research
- Statistical methodology or biostatistical methods pertaining to cancer control, survivorship and outcomes research
- Surveillance infrastructures
- Centers, consortia, and/or networks pertaining to cancer control, survivorship and outcomes research
- Development and characterization of new model systems for cancer control, outcomes or survivorship, distribution of models to scientific community or research into novel ways of applying model systems, including but not limited to computer-simulation systems, software development, in vitro/cell culture models, organ/tissue models or animal model systems. Guidance note: this should only be used where the focus of the award is creating a model. If it is only a tool or a methodology, code to the research instead.
- Psychosocial, economic, political and health services research frameworks and models
- Education and training of investigators at all levels (including clinicians and other health professionals), such as participation in training workshops, conferences, advanced research technique courses, and Master's course attendance. This does not include longer-term research-based training, such as Ph.D. or post-doctoral fellowships.
APPENDIX B: SAMPLE OF GENERAL AUDIENCE SUMMARY

This project is a career development award for Jasper Jones, M.D. The award will improve Dr. Jones’s skills in screening for liver cancer as well as skin cancer in patients at the University of the Mountains. It will also allow him to teach students, residents, and practicing physicians these skills.

The research project is a survey of physicians on their attitudes and practice toward the screening of hepatitis B, hepatitis C, and liver cancer. Liver cancer is a disease that is growing in importance and disproportionately affects some populations such as Asian Americans, African Americans, and Latino Americans. Viral hepatitis B and C infections, which can predispose to the development of liver cancer, are also common in these populations. There are good screening tests for viral hepatitis B and C, and increasingly, there are effective treatments for these diseases. There are also screening tests for liver cancer that may enable detection of smaller size tumors. Little is known, however, regarding what physicians are offering patients with respect to these screening tests. The research project will address this by surveying primary care physicians and specialists in liver diseases regarding their practice in screening for hepatitis B, hepatitis C, and liver cancer in high-risk groups. The results will lead to more accurate description of current physician practices in the prevention of liver cancer and may lead to interventions to target those physicians who may be underscreening or overscreening for these diseases.
APPENDIX C: CRITERIA FOR THE REVIEW OF APPLICATIONS

The following items are used by reviewers in evaluating applications for the Cancer Control Career Development Award for Primary Care Physicians:

If the application is a resubmission, comment on the adequacy of the response to the prior review.

CANDIDATE
- Goals and commitment to cancer control
- Education
- Training
- Clinical, teaching, and research experience
- Publications
- Personal characteristics
- Overall appropriateness of candidate for the CCCDA

SPONSOR / MENTOR(S)
- Qualifications of sponsor(s) in candidate's primary care specialty
- Qualifications of sponsor(s) in research
- Commitment of sponsor(s) to program
- Time available for supervision of the program
- Appropriateness of sponsor(s) to candidate

INSTITUTION
- Proven ability to support the career development of primary care academic faculty
- Commitment of institution to cancer prevention, detection, epidemiology, and patient follow-up
- Adequacy of facilities and resources, including numbers of patients treated
- Commitment of facilities, equipment, support personnel, supplies, etc. to CCCDA candidate
- Commitment of a senior sponsor/mentor who is a recognized primary care specialist
- Qualifications of other pertinent department/institutional staff (including additional mentors)
- Evidence that the institution has made a commitment to the candidate’s career development
TRAINING PLAN

- Learning and faculty development opportunities (courses, lectures, continuing education, etc.) planned for candidate
- An organized progression of planned and integrated activities that will support the career development of the candidate over the course of the award
- A clear timeline of planned activities with identified milestones such as scholarly products or publications

CLINICAL AND TEACHING ACTIVITIES

- Adequacy of clinical and teaching activities to provide for progression and maturation of expertise in these areas, including allocated percentage of time
- Commitment and focus on cancer control

CANCER CONTROL PROJECT (format should follow headings listed in Instructions)

- Clearly identified objectives and plan
- Innovativeness and relevance of the proposed project
- Adequacy of proposed project to develop investigative/scholarly skills
- Plan to submit for approval of human research committee if human subjects are to be part of proposed research

In developing a final recommendation, the reviewers will combine their assessments of each of the following areas according to the indicated “weights:”

15% – The candidate’s qualifications for the award including prior training and experiences. Also, the presentation of the proposed program and candidate responsiveness to feedback during the interview;

15% – The participation of the mentor(s) in the proposed program and the institutional resources and commitment to the candidate;

20% – Career development and training plan for the candidate;

10% – Proposed clinical and teaching activities; and the

40% – Proposed cancer control project (research proposal or evaluation of an educational intervention).