Dear NCI grantee,

This correspondence is regarding an opportunity focused on Early-Onset Cancer (EOC) research.

**Purpose**

The National Cancer Institute (NCI) participates in the National Institutes of Health (NIH) Parent Program Announcement [PA-20-272](https://grants.nih.gov/grants/guide/pa-files/PA-20-272.html), "Administrative Supplements to Existing NIH Grants and Cooperative Agreements (Parent Admin Supp Clinical Trial Optional)." Through this notice, NCI announces interest in supporting the development of research tools and resources, and discovery pilots within the scope of eligible active NCI-funded awards (see below). The following awards are designed to support and advance research aimed at understanding and addressing Early-Onset Cancer (EOC). The NCI defines EOC as cancers typically prevalent in individuals aged 50 and older, but which are now being diagnosed with increasing incidence in the 18-49 age group. This award will specifically focus on EOC and special consideration and priority will be given to applications addressing the following cancer types: breast, colorectum, uterus, kidney, and pancreas in ages 18-49. (However, applications focused on other types of EOC will also be considered.

This opportunity is open to currently funded NCI-designated cancer centers (P30s) <https://grants.nih.gov/grants/guide/pa-files/PAR-21-321.html> and P50 SPORE grants https://grants.nih.gov/grants/guide/pa-files/PAR-23-284.html. The initiative provides a first step in addressing scientific research gaps in the field of EOC and leverages the existing infrastructure and expertise of the Cancer Center and SPORE programs. Additionally, this administrative supplement provides opportunities to generate preliminary data and developmental projects for future EOC submissions. e.g. R21, R01. Evaluation of this supplemental funding will also help to inform future funding opportunities for EOC research.

Specifically, the goals are to:

1. Support research that addresses critical unanswered scientific questions aimed at understanding the causes of EOCs. Investigators are encouraged to consider multiple associated factors (e.g., environmental, lifestyle, social determinants of health, geographical risk factors) and their connectivity. Additionally, the research may explore novel risk factors contributing to the rise in EOC. Investigations focused on population-wide screening, and/or changes in technology are of interest, as are modeling studies to understand important risk factors that may contribute to the rise in EOC.
2. Support exploratory research that investigates the mechanistic differences underlying the biology of EOC compared to cancers with later onset. This research is highly encouraged to address scientific questions related to the molecular pathogenesis and molecular phenotyping of EOC, focusing on distinct characteristics not seen in cancers diagnosed in older populations.
3. Support research to examine and address reproductive health, mental health, concerns related to the life stage (such as new reliance on parents or delaying educational goals), financial toxicity, or survivorship care for younger patients. Investigators are encouraged to develop, refine, and pilot test strategies to address these challenges, considering the unique needs of patients at younger ages.

NOTE: While NCI encourages supplemental applications across early-onset cancer types, special consideration will be given to applications focusing on cancers of the breast, colorectum, uterus, kidney, and pancreas. Additional consideration will also be given to applications that focus on non-hereditary cancers. Supplement applications will be expected to present a resource or data sharing plan for evaluation by program staff.

Research activities of interest include, but are not limited to:

* Identifying and characterizing potential environmental and lifestyle exposures that contribute to the etiology of EOCs
* Characterizing molecular signatures of early-life influences/exposures and social determinants of health that could help explain the observed increase in EOC incidence
* Interrogating existing biospecimen repositories to identify common EOC molecular signatures
* Identifying potential carcinogenic mechanisms (e.g., cell signaling, immune and metabolic changes), tumor genetics, and/or microbial signatures that contribute to the development of EOCs
* Exploring relatively undescribed genetic contributions to EOC and interactions with environmental exposures through association studies and/or polygenic risk score development
* Identifying potential molecular pathways/targets for cancer prevention, control, and interception
* Exploring specialized care for survivorship issues of particular importance for young adults, including reproductive health preservation

Applications considered non-responsive include:

* Research projects focused on individuals with cancers diagnosed in those over 50 years of age or those diagnosed under the age of 18 (i.e., pediatric populations)
* Applications focused solely on hereditary/familial cancer syndromes (e.g., Lynch syndrome, familial adenomatous polyposis, Li-Fraumeni syndrome, Hereditary Breast and Ovarian Cancers, etc.) or rare germline genetic variations.

The parent grant must have sufficient time remaining to achieve the goals of the administrative supplement. Investigators can submit one administrative supplement per eligible grant award.

The application must include an appropriate resource or data sharing plan, in which applicants are expected to provide the following information:

* What data/resources will be shared.
* When the data/resources be shared; and
* How the data/resources will be shared and with whom.

Supplement budgets are limited to 1 year and may not exceed $100,000 in direct costs. Supplement applications should include a clear institutional commitment to the proposed project. Examples include comparable institutional support for the project, leverage of existing tumor biorepositories, etc. Funding priority will be given to projects deemed likely to advance an understanding of EOC and improve survivorship through outstanding science and clear and strong institutional commitments.

**Application**

**Page Limits**

The application must include the following sections and adhere to the following limits:

* Project Summary/Abstract: 30 lines of text
* Project Narrative: 3 sentences
* Specific Aims: 1 page
* Research Strategy: 3 pages
* Biographical Sketch: for Senior/Key Personnel and Significant Contributors only

Applications should be submitted to [PA-20-272](https://grants.nih.gov/grants/guide/pa-files/PA-20-272.html) by June 4, 2025. To be considered for this 12 month funding opportunity, please submit your official request for consideration via eRA Commons to the parent award using PA-20-272 https://grants.nih.gov/grants/guide/pa-files/PA-20-272.html on or before June 4, 2025. Please note that requests received after this date will not be considered.

**Review and Selection**

Applications will be administratively evaluated according to the criteria of [PA-20-272](https://grants.nih.gov/grants/guide/pa-files/PA-20-272.html) in June 2025 based on: overall responsiveness/eligibility determinations, including in scope requirement; the qualifications of the applicant; the appropriateness and adequacy of the proposed data-sharing plan; and the amount of available funds.

**Inquiries**

Please direct all inquiries to:

*Center to Reduce Cancer Health Disparities*

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