Cancer Center

NCI-DESIGNATED COMPREHENSIVE CANCER CENTER

REQUEST FOR APPLICATIONS

TO: **Full and Mentored** Members of the Molecular and Cellular Oncology Program

FROM: Tin Tin Su, PhD, Program Co-Leader, Molecular and Cellular Oncology Program
Patricia Ernst, PhD, Program Co-Leader, Molecular and Cellular Oncology Program
Evelinn Borrayo, PhD, Associate Director, Community Outreach and Engagement
Jan Lowery, PhD, Assistant Director, Community Outreach and Engagement

RE: Molecular and Cellular Oncology Program Pilot Grants – 2023

DATE: May 8, 2023

The Molecular and Cellular Oncology (MCO) Program of the University of Colorado Cancer Center, in collaboration with the office of Community Outreach and Engagement (COE),is offering **a new pilot grant opportunity** for Full and Mentored members of the MCO Program. Up to three $50,000 pilot grants will be awarded, depending on the merit of proposals received. Projects should be designed so that they can be realistically completed in one year. The intent of these pilots is to lead to national-level grants. Investigators will need to outline clearly how this pilot data will support future grant submissions. Proposals are due on June 15, 2023 and awards are anticipated to start on July 1 2023.

The proposals will be competitively reviewed and assigned an NIH-style overall impact score based on significance, investigator(s), innovation, approach, environment, likelihood of producing results that will help obtain NCI or other national funding, and relevance to the catchment (more information below).

This opportunity has developed from discussions at the MCO Program's 2022 and 2023 retreats and will include a scoring criteria based on how well the proposal addresses cancer topics of relevance to the Colorado population ('the catchment'). The proposal will be considered particularly relevant if it addresses disparities in cancer risk and outcomes as influenced by race, ethnicity, socio-economic status, residence (e.g. rural vs. urban, proximity to environmental exposures like radon), or inherited factors within under-represented minority (URM) communities. For more information about UCCC-defined catchment priorities please see the COE Fact Sheet. The investigators may contact Evelinn Borrayo, Stacy Fischer or Jan Lowery to discuss the application and catchment data. Investigators may also consider using genotyping data currently available through the Colorado Center for Personalized Medicine (CCPM) Biobank and may discuss this approach with Nikita Pozdeyev.

Collaborative efforts leading to multi-PI and/or multi-project (SPORE or PPG) grants are encouraged. Projects will be awarded for 1 year. Extensions will be considered only in extreme circumstances. Recipients will be expected to submit competitive national grant proposals within 6 months following the completion of this pilot project.

Inquires about how well your project idea fits the mission of this pilot mechanism should be sent in a brief email to Ellen Valentine.

Submit your application on-line at:

https://app.smartsheet.com/b/form/ceda2ace057c44ecbc85eb9bed16de07

By 5 pm June 15, 2023

If you have any questions about the submission process, please contact Michelle Guney (CC_FundingOps@cuanschutz.edu)

APPLICATION GUIDELINES

Applications must include all sections outlined below. Non-conforming applications will not be reviewed. All narrative sections must maintain at least ½ inch margins, at least single-spaced, and with 11-point font or larger.

Individuals interested in applying must be Full or Mentored members of the MCO Program but collaborators can be from any program. If you have questions about your membership status, please contact Ellen Valentine.

Only one proposal per contact/lead PI will be accepted.

Title Page: Include the title of the project and the name and email address of the Principal Investigator(s) and other Key Personnel.

Project Summary: Include a summary of the project not to exceed one-half page or 30 lines of single-spaced type. It should consist of a brief description of the objectives, rationale, methods, and expected results.

Budget: A categorical budget request for the project must be provided. The budget request can be up to $50,000 direct costs for one year only. Faculty salary support is not allowed. Salary for trainees and fellows is allowable up to $25,000. Use of Cancer Center subsidized shared resources is encouraged as applicable to the project. Funds will not be provided to pay for standard of care clinical services or other expenses that are reimbursable through insurance. Awards are made with institutional funds. No indirect costs will be funded. The anticipated start date for awards is July 1, 2023. Please include a justification for all costs. Requests for travel funds or for items of capital equipment (i.e., equipment at or exceeding $5,000 per item) will require detailed justification.

Project Narrative: Provide a complete but concise description of the project including the following sections (adherence to stated word limits is required):

- Specific Aims
- Significance
- Innovation
- Approach
- An explicit statement of catchment relevance (250 word limit)

The ***Project Narrative should be no more than 4 typed pages (1 page for Specific Aims, 3 pages for Significance, Innovation, Approach and Catchment Relevance)***.

Anticipated grant plans (use the table below, not included in the 4-page limit).

Anticipated Grant Plans	
Anticipated Grant Sponsor:	
Anticipated Grant Mechanism:	
Anticipated Grant Deadline:	
Additional Grant Information (Narrative):	

References (on a separate page not included in the 4-page limit): References should be limited to 1 page.

Biographical Sketch(es): Include an NIH-style biographical sketch for all key personnel listed on the title page and **for collaborative grants explain the nature/need for the collaboration in your personal statement.**

Regulatory Documentation (not required for the application): If the study involves human subjects, vertebrate animals, or recombinant DNA research, approval of the study by the properly constituted Institutional Review Board, Institutional Animal Care and Use Committee, Protocol Review and Monitoring Committee, and/or Biosafety Committee are required by the time of the award. ***Funds will not be awarded until documentation of all required regulatory approvals are provided***. Failure to provide required approvals within 3 months of the award date will result in forfeiture of the award.

REVIEW AND AWARD PROCESS

Applications are reviewed for scientific merit by a Study Section convened by the MCO program. The evaluation criteria are attached at the end of this RFA. The anticipated start date for the award will be July 1, 2023. The Cancer Center's Administrative Office will set up speed types for all pilots selected for funding.

PUBLICATIONS

All publications, abstracts, or similar dissemination efforts resulting from an award must acknowledge this support by inclusion of the statement: *"Supported by a pilot grant from the University of Colorado Cancer Center's Molecular and Cellular Oncology Program and Office of Community Outreach and Engagement."*

Projects that use Cancer Center Shared Resources must include the following acknowledgement and be submitted to PubMed Central: *"Research supported by the ### Shared Resource funded through the University of Colorado's Cancer Center Support Grant (P30CA046934)."*

PROGRESS REPORTS

A final report summarizing the results of the studies, detailing your pursuit of national-level funding (list specific sponsors, FOAs and deadlines), and listing any publications resulting from the work **will be due two months after the grant end date.** Awardees will be provided a weblink for submission of their final report 60 days in advance of the due date.

Ongoing updates and requests for outcomes related to the project (publications, subsequent federal grants, publications, and other outcomes i.e., patents, or other intellectual property) will be made for up to 4 years after the completion of your project.

EVALUATION CRITERIA

Applications will be evaluated using the NIH scoring system (1-9) and parameters (below).

1. Significance
- Does the project address an important problem or a critical barrier to progress in the field?
- How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?

2. Investigators
- Are the PD(s)/PI(s), collaborators, other researchers, and community partners/stakeholders (if appropriate) well suited to the project?
- If the project is collaborative, do the investigators have complementary and integrated expertise?

3. Innovation
- Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions?
- Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense?

4. Approach
- Are the overall strategy, methodology, and analyses justified and appropriate to accomplish the specific aims of the project?
- Have the investigators presented strategies to ensure a robust and unbiased approach, as appropriate for the work proposed?
- If the project is in the early stages of development, will the strategy establish feasibility?

5. Environment
- Will the scientific environment in which the work will be done contribute to the probability of success?
- Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?

6. Probability of Leading to External Funding
- Does the application make a compelling argument for a trajectory leading to external funding?
- How will funding this application 'push the research over the top' for funding- (e.g., address a key gap in a prior proposal)
- Does the application provide examples of relevant potential mechanisms for external support?

7. Catchment relevance

Does the application address a cancer topic of relevance to the catchment as defined by COE (COE Fact Sheet)? Here are three examples of projects with catchment relevance but many more are possible.

1. Prostate cancer is the second most incident and cause of mortality in Colorado men and accompanies higher mortality in African Americans (AA) regardless of disease stage at diagnosis. You propse to examine molecular mechanisms that could help understand the disparity, for example a comparative analysis or AA and non-AA prostate cancer cells.
2. You read in a large GWAS study that several variants in the coding region of the CDKN2A gene are enriched in a Latino/Hispanic population in the US and are associated with increased risk for childhood acute lymphoblastic leukemia. You propose to use CRISPR/Cas9 to edit a commonly used cell line to harbor this risk allele, then you study the growth characteristics and drug sensitivity of your isogenic lines to understand whether this variant predisposes cells to resist a commonly used chemotherapy.
3. You study DNA damage responses (DDR). You identify an environmental pollutant that CO populations are exposed to and propose to study the effect of that pollutant in your DDR assays.

OVERALL IMPACT

Reviewers will provide an overall impact score to reflect their assessment according to the above review criteria.