2015 Pancreatic Cancer Action Network –
NCI, Frederick National Laboratory for Cancer Research
KRAS Fellowship

Program Guidelines and Application Instructions

Please direct questions to:

Pancreatic Cancer Action Network

Grants Program, Research & Scientific Affairs

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1

TABLE OF CONTENTS

I.   PROGRAM GUIDELINES

PROJECT FUNDING AND CRITERIA

The Pancreatic Cancer Action Network (PanCAN) and the National Cancer Institute's (NCI) Frederick National Laboratory for Cancer Research (FNLCR) have joined together to award a Fellowship to a postdoctoral or clinical research fellow to conduct a research project that has a structural-based approach to the KRAS mutants that are relevant to pancreatic cancer (e.g., G12D and G12V).

PanCAN has a competitive Grants Program that funds the most promising and meritorious research on pancreatic cancer. In recognition of the urgent need to accelerate scientific and medical breakthroughs and with the guidance of our Scientific and Medical Advisory Board, in February 2011 the organization adopted the bold goal to double survival from the disease by the year 2020. For more information about this goal, see http://www.pancan.org/section-about/vision-of-progress/.

In 2013, the NCI established the RAS Program, which aims to develop ways to target cancer cells that are driven by mutations in the family of genes known as rat sarcoma viral oncogene homolog (*RAS*). *RAS* genes code for a set of proteins that are instrumental in cellular signaling and, when mutated, permit uncontrolled cellular proliferation in several malignancies. *KRAS* is the most commonly mutated *RAS* gene and is involved in 95% of pancreatic cancer cases.

FNLCR is serving as the "hub" of the RAS Program and is connecting scientists there with investigators studying RAS at NCI's intramural laboratories and in the "spokes" of academic institutions, pharmaceutical industry, and biotech companies. The RAS Program is comprised of seven projects: target validation (Project Zero); direct focus on the RAS mutation (Projects 1-5); and the supply of qualified and standardized reagents (Project 6). Project 1 aims to generate new structures for mutant KRAS variants and complexes, and to identify variant-specific complexes that have therapeutic potential. Variant KRAS G12D accounts for approximately 40% of pancreatic cancer cases and G12V accounts for an additional 25%. For more information about the RAS Program, see http://www.cancer.gov/researchandfunding/priorities/ras.

The 2015 KRAS Fellowship will support a project with goals aligned to the RAS Program's Project 1. The proposed project should align with efforts to determine the protein structure of KRAS mutations relevant to pancreatic cancer to identify potential drug binding pockets to modulate oncogenic KRAS mutation activity or to favorably alter interaction with important binding partners. Experimental techniques could involve structure-based drug design, protein analyses, pilot crystallization, biophysical analysis of KRAS-Calmodulin interaction to inform high-throughput screening assays, and characterization of mutations such as G12D and/or G12V in human tumor cells via mass spectrometry. Note that these are examples, and proposed projects are allowed to deviate from these experimental strategies.

The Fellowship will be awarded using a competitive, rigorous peer-review process that is coordinated by FNLCR and PanCAN. The selected postdoctoral or clinical research fellow will receive $45,000 over one

year for direct research expenses, including salary and benefits, laboratory supplies, equipment (maximum of 10% of grant), third party consultant fees, and publication charges for manuscripts that pertain directly to the funded project. Additional funding, separate from the grant, is available for the Fellow to participate in pre-approved scientific mentoring and career development activities offered through PanCAN and FNLCR (see below).

It is anticipated that one Fellowship will be funded.

IMPORTANT DATES

E-APPLICATION DEADLINE
October 15, 2014 at **Noon, Eastern Time**

DECISION DATE
December 15, 2014

START OF GRANT TERM
January 1, 2015

PANCREATIC CANCER ACTION NETWORK SCIENTIFIC AND NETWORKING RETREAT
August 27-30, 2015, San Diego, CA and 2016 (dates and location to be determined) – Fellow will be required to attend. This is an annual series of activities that involve scientific and networking sessions for knowledge exchange, research feedback, mentorship, and collaborations. Also attended by other PanCAN grant recipients, members of the Scientific and Medical Advisory Board and Board of Directors, donors, and the broader pancreatic cancer community. Support for travel is provided by PanCAN separate from the grant.

NCI FREDERICK NATIONAL LABORATORY FOR CANCER RESEARCH MENTORSHIP
Dates to be determined, Frederick, MD – During the grant term, the Fellow will be invited to visit the NCI FNLCR for help planning experimental approaches for the funded project, and to participate in scientific lab meetings, receive mentoring through interaction with RAS program leadership and scientists, and attend RAS workshops. The Fellow also will be trained and granted access to FNLCR technology capabilities to support their research during the award. Travel support for approved visits will be provided by PanCAN and FNLCR separate from the grant.

APPLICANT ELIGIBILITY CRITERIA
Applicants must have a medical and/or doctoral degree (including PhD, MD, DO, PharmD, or equivalent doctoral degree) in the biomedical sciences or in a field applicable to health science research.

At the start of the grant term on January 1, 2015, applicants must:

- be in a postdoctoral or clinical research fellowship; and

- work under the auspices of a mentor at an academic, medical, or research institution within the United States.

There is no limit on the length of time the applicant has been in a fellowship position. While there are no citizenship requirements, by submitting an application for this grant, the applicant who is not a United States citizen or permanent resident assures that his/her visa status will provide sufficient time to complete the project and grant term within the United States.

Investigators who believe they are at the level of a postdoctoral or clinical research fellow, but hold a different title (e.g., M.D. with an Instructor title), may be eligible to apply and should contact PanCAN at grants@pancan.org before submitting an application.

Employees or subcontractors of a government or for-profit entity are not eligible.

Applicants may submit only **one** application for the KRAS Fellowship. If interested, they may also apply for a 2015 Pancreatic Cancer Action Network – AACR Pathway to Leadership Grant (see grant guidelines at www.pancan.org/2015grants).

PRIMARY MENTOR'S LETTER OF REFERENCE
Each applicant must have a letter of reference from the primary mentor accompany the online application. Instructions for submitting the letter are addressed below on page 7, Section 6 in the Application Instructions.

EVALUATION OF APPLICATIONS
Applications are reviewed by a Grant Selection Committee comprised of scientists who are respected for their accomplishments in RAS research and/or pancreatic cancer research.

The Committee will consider the following criteria when reviewing applications and determining funding decisions:

- *Project Proposal*. Is the proposed project of high scientific merit? Are the aims and activities reasonable and achievable within a one year period? Are the proposed research design and methodology appropriate? Does the project have the potential to impact pancreatic cancer?

- *Applicant.* What training and experience does the applicant have to ensure successful implementation of the proposed project? Is his/her academic record and research experience of high quality? Does the applicant have the potential to develop as an independent and productive researcher?

- *Mentor.* Does the mentor have a reputable track record in RAS research and the necessary skills and expertise to successfully supervise the proposed project? Does a record of mentorship exist and is there evidence of a commitment to the applicant and to the proposed project?

- *Institutional Environment*. Is the institutional environment conducive to the success of the project and to the career development of the applicant? Is there evidence that the applicant will have access to the institutional resources needed to complete the proposed project?

II.   APPLICATION INSTRUCTIONS

APPLICATION PROCEDURES

Applications must be submitted by Noon, Eastern Time on Wednesday, October 15, 2014, using the proposalCENTRAL website at https://proposalcentral.altum.com/default.asp?GMID=123

To submit a complete application, applicants need to directly input information into the online application platform as well as upload a number of documents. The following instructions provide details about information that needs to be inputted and the materials that need to be uploaded. The section numbering corresponds with the section number of the online application.

Information to be Entered Directly into proposalCENTRAL	Instructions/proposalCENTRAL Section
Title Page	1
Applicant Information	4
Institution and Contacts	5
Scientific Abstract	7
Organizational Assurances	8

Templates to be Downloaded, Completed and Uploaded	Instructions/proposalCENTRAL Section
Research Project Proposal Template	9
Other Funding Template	9
Budget and Budget Narrative Template	9

Non-Template Materials to be Uploaded	Instructions/proposalCENTRAL Section
Applicant's Biographical Sketch	9
Primary Mentor's Biographical Sketch	9
Letter of Recommendation (uploaded by Primary Mentor)	6

Materials to be Downloaded, Printed, Signed, Scanned and Uploaded	Instructions/proposalCENTRAL Section
Signed Acknowledgement of Grant Terms and Conditions	9
Application Signature Pages	9/12

GETTING STARTED IN proposalCENTRAL
If you are a new user of proposalCENTRAL, follow the "REGISTER" link and complete the registration process. After you register, complete your Professional Profile (second tab from the left) before starting an application.

If you are already registered with proposalCENTRAL, access the site and log in with your Username and Password. If you have forgotten your password, click on the "Forgot your password?" link. Supply your

User ID or e-mail address in the space provided; your password will be sent to you by e-mail.

To start an application, select the "Grant Opportunities" tab (gray tab furthest to the right). A list of applications will be displayed. Find the "Pancreatic Cancer Action Network – NCI, Frederick National Laboratory for Cancer Research KRAS Fellowship" and click the "Apply Now" link (second to last column) to create your application.

Complete all fields in the application and all templates that are provided. Upload all requested documents in portable document format (PDF). For more information, see the proposalCENTRAL FAQ section, https://proposalcentral.altum.com/FAQ/FrequentlyAskedQuestions.asp.

If you have any difficulties registering, logging in, or creating your application, contact proposalCENTRAL Customer Support:

> Phone: 1-800-875-2562 or (703) 964-5840   E-mail: pcsupport@altum.com

APPLICATION FORMAT
The following information is required to submit a complete application. Numbers correspond to the application sections found on the left side of the proposalCENTRAL website.

1. **TITLE PAGE.** Enter the title of the research project directly into the proposalCENTRAL system. The title is limited to no more than 75 characters in length (including spaces). Do not use abbreviations. A project title must be entered and saved before additional sections may be accessed.

2. **DOWNLOAD TEMPLATES & INSTRUCTIONS**. The Program Guidelines and Application Instructions document, the Terms and Conditions document, and all templates can be downloaded from this page.

    The following three templates must be downloaded and completed: Research Project Proposal, Other Funding, and Budget and Budget Narrative.

    ·   Click the "Download" link to save each of the templates to your computer.

    ·   Use your word processing software (e.g., MS Word, WordPerfect) to complete the templates, and then convert the templates to PDF format. You do not need to be connected to the internet or proposalCENTRAL while working on the templates.

    ·   Upload the completed template files to your online application.

    The Grant Terms and Conditions must be downloaded and the last page signed by the applicant.

    See below on page 8, Section 9 in the Application Instructions for how to complete and upload the templates and the signed, last page of the Grant Terms and Conditions document. This application also requires additional attachments for which a template is not provided (Applicant's Biographical Sketch and Primary Mentor's Biographical Sketch).

3. **ENABLE OTHER USERS TO ACCESS THIS PROPOSAL.** Optional.

4. **APPLICANT.** Enter information for the applicant directly into proposalCENTRAL system.

5. **INSTITUTION & CONTACTS.** Enter information regarding the lead institution, the primary mentor, and signing official directly into the proposalCENTRAL system.

6. **PRIMARY MENTOR'S LETTER OF REFERENCE.** Enter directly into the proposalCENTRAL system the e-

mail address of the primary mentor submitting a letter of reference. Enter the e-mail address again to confirm and click "Add." If the mentor's e-mail address is in the proposalCENTRAL system, you will be prompted to "Send E-mail" to the mentor. The e-mail will contain instructions and a link to upload the letter of reference directly to the application. If the mentor's e-mail address is not in the proposalCENTRAL system, you will be prompted for the mentor's first and last name before being prompted to "Send E-mail."

As the letter of reference is uploaded directly from the mentor to the proposalCENTRAL application, this letter must be uploaded before the application can be submitted. Applications cannot be submitted without the Primary Mentor's Letter of Reference. Applicants can view the letter submission status by returning to proposalCENTRAL's Letter of Reference section.

7. **SCIENTIFIC ABSTRACT.** Enter the abstract directly into the proposalCENTRAL system. The abstract should be limited to 3,000 characters (including spaces) and must provide a concise and comprehensive overview of the foundational research that justifies the proposed project, the proposed aims, study design and methods, expected accomplishments by the conclusion of the grant term, and their relevance to pancreatic cancer.

   NOTE: The proposalCENTRAL system does not lock the scientific abstract field after 3,000 characters have been entered. To ensure that your abstract does not exceed the character limit, before proceeding to the next section click the red "Save" button at the top or bottom of the screen. If the scientific abstract is too long, you will receive an error message at the top of the page.

8. **ORGANIZATIONAL ASSURANCES.** Select the appropriate assurances options for your proposed research and complete the Approved or Pending Date field as appropriate (i.e., mm/dd/yyyy, N/A, or None). The assurances/certifications are made and verified by the signature of the institutional official signing the application. If a grant is awarded, IRB and/or IACUC approval (if applicable) must be submitted in writing to PanCAN's Research & Scientific Affairs Department.

9. **APPLICATION DOCUMENTS.**
   Formatting Instructions:

   ▪ Type size. 12 point Times New Roman for the text, and no smaller than 9 point type for tables, figures or other images, if included.

   ▪ Line Spacing. Single-spaced format, and indent to begin new paragraphs.

   ▪ Margins. Page margins no less than .75 inches on each side.

   ▪ Instructions for inserting images.

     · Should be included on a very selective basis and only if critical to the application. Images **count** toward the 2 page limit of the Proposal Narrative.

     · Reduce the file size of documents with images by "inserting" the image (as opposed to "cutting" and "pasting"). Save graphical images as a JPG or GIF file. Insert the image into the document by selecting "Insert – Picture – From File" from the MS Word menu.

     · Insert only GIF or JPG graphic files as images in your Word document.

     · Do not insert Quick Time or TIFF objects into your document.

     · Anchor the images that are embedded in the document.

- Once the inserted image is anchored, format the text to wrap around the image.

- Do not edit images in Word. Use a graphics program.

- Do not embed images in tables, text boxes, and other form elements.

- Do not add annotations over the images in Word. Add annotations to the images itself in a graphics program.

Using the templates where provided, prepare and upload the following documents into your application in portable document format (PDF):

A. Research Project Proposal. *Complete on the template available from the proposalCENTRAL website. (Refer above on page 7, Section 2 in the Application Instructions for details.) The information must be presented in this order:*

    I. Proposal Narrative. Limited to 2 pages, <u>including</u> tables, figures or other images. The Proposal Narrative must be presented in this order: (A) Foundational Research; (B) Project Aims; (C) Research Design and Methods; and (D) Accomplishments.

    II. References. Limited to 1 page, references must be listed as FULL CITATIONS. Each citation must include names of all authors, publication title, journal or book title, volume number, page numbers, and year of publication.

B. Other Funding. *Complete on the template available from the proposalCENTRAL website. (Refer above on page 7, Section 2 in the Application Instructions for details.)* List all secured and pending funding for the applicant during the term of this grant (01/01/2015 – 12/31/2015), regardless of the project focus and whether or not the applicant is the Principal Investigator. Specify:

- Whether Funding is Secured or Pending
- Name of Principal Investigator
- Funder/Type of Grant
- Project Title
- Amount of Funding
- % Effort of Applicant
- Specific Aims as Stated in Grant

    NOTE: If at any time prior to being notified of the funding decision for the 2015 KRAS Fellowship an applicant is advised of being awarded funding that may overlap with the project proposed in this application, the applicant must notify PanCAN immediately.

C. **Budget and Budget Narrative.** *Complete on the template available from the proposalCENTRAL website. (Refer above on page 7, Section 2 in the Application Instructions for details.)* The Fellowship supports direct research expenses, including salary and benefits for the grantee, laboratory supplies, third party consultant fees, equipment (not to exceed 10% of grant), and publication charges for manuscripts that pertain directly to the funded project.

Indirect costs, tuition, professional membership dues, general office supplies, institutional administrative charges (e.g., telephone, other electronic communication, IT network, etc.), pre-award charges, and any other expenses not directly related to the proposed project are **not** allowable expenses.

Do not allocate funds from the grant for travel for the FNLCR site visit(s) or for PanCAN scientific sessions. Travel support for approved events are provided separate from the grant. In addition, no grant funds may be directed to any government or for-profit entity.

In the **Budget Narrative**, specify: (1) The percent effort to be allocated by the applicant to the proposed project; (2) Total annual salary of the applicant for January 1, 2015 – December 31, 2015. If any part of the applicant's salary is requested to be funded by the 2015 KRAS Fellowship, the amount requested must correspond with the percent effort indicated; (3) Limited to ½ page, explain expenses requested to be funded by the KRAS Fellowship.

D. **Applicant's Biographical Sketch.** The biographical sketch must be in English. The NIH Biographical Sketch Form [PHS 398/2590 (Rev. 06/09)] is an acceptable format. The biographical sketch may not exceed four pages.

E. **Primary Mentor's Biographical Sketch.** The biographical sketch must be in English. The NIH Biographical Sketch Form [PHS 398/2590 (Rev. 06/09)] is an acceptable format. The biographical sketch may not exceed four pages.

F. **Signed Acknowledgment of Grant Terms and Conditions Document.** To ensure the applicant is informed of the terms and conditions of the grant, a copy of the Grant Terms and Conditions must be downloaded from the proposalCENTRAL site. Applicants must remove the final page of the Terms and Conditions document and sign and date it, acknowledging that they have received and read the document. The terms and conditions of this grant may be modified or amended by PanCAN prior to execution of the Grant Agreement. *A scanned copy of the signed final page must be uploaded* to your online application in the section for attaching files.

G. **Application Signature Pages.** To ensure that the applicant and institution have approved the application, applicants must print the Signature Pages, as described in section 12 below, and obtain all required signatures. The **signed Signature Pages** (with original signatures from the applicant and institution's signing official) must then be *scanned and uploaded into the online application*.

Uploading the attachments into your application. Once you have converted your attachments to PDF files, the next step is to upload the files to your online application.

- Make certain that the converted PDF files are closed on your computer.

- Open your application and go to the section for attaching files.

- Enter your own description of the file in the "Describe Attachment" field.

- Select the appropriate type of attachment from the drop-down list. *NOTE: After selecting attachment type, the screen will show the file types (e.g., PDF, .doc) that are allowed for that type of attachment. Only PDF attachments are permitted for this application submission.*

- Click on the "Browse" button to select the file from your computer.

  - A "choose file" dialog box opens for you to search for the template file on your computer's hard disk or local area network.

  - Select the file and click "Open."

  - The file location and name will display in the window adjacent to the "Browse" button.

▪ Click on the "Upload Attachment" button. You will get a confirmation message on your screen that the file was uploaded successfully. You also will see that your file is now listed in the "Uploaded Attachment" section of the screen. Two links are available in each row of an uploaded attachment: DEL and SHOW. "DEL" allows you to delete the file, if necessary, and "SHOW" opens the uploaded file. **Open and review your uploaded files.**

In the section for attachments, all the required attachments are listed in the middle of the screen, just below where you upload your files. This list of required attachments helps you track completion and uploading of your required attachments. Once you upload a required attachment, that attachment type will be removed from the required list and will be displayed in the "Current list of uploaded attachments."

If you wish to modify the attached file, make the revisions to your *original* file on your computer (off-line), convert the file to PDF, and use the same process above to attach the newly revised file. **Delete any previously submitted versions of the file before submitting your application.**

SUBMITTING COMPLETE APPLICATION

10. **PI DATA SHEET.** This is an automatically populated data sheet based on the applicant's proposalCENTRAL profile. Information for gender, race, and ethnicity must be provided. If fields are not populated, go to Section 4, Applicant, and select the "Edit Professional Profile" tab in the center of the screen. The applicant must then go to the column on the left side of the screen, select "4) Personal Data for Application" and enter his/her gender, race, and ethnicity. The Grant Selection Committee does not receive this information.

11. **VALIDATE.** Validate the application on proposalCENTRAL. This is an essential step. 'Validate' checks for required data and required attachments. You will not be able to submit the application if all the required data and attachments have not been provided.

12. **SIGNATURE PAGES AND PRINT APPLICATION.** After completing sections 1, 4, 5, 7, and 8 of the electronic application (these sections also correspond to the sections of the Applications Instructions), you may print the Signature Pages. Use the "Print Signature Pages" print button. Click this button to print the Signature Pages for signatures.

Note: Data that you entered in sections 1, 4, 5, 7, and 8 of the online application are automatically included in the Signature Pages. If information is missing in the Signature Pages, it could be because you have not entered the information in one of the proposal sections OR the information is not required for this grant program. If the institution's Employer Identification Number (EIN) is not completed on the Signature Pages, please request your institution to provide that information in their proposalCENTRAL profile.

The print option "Print Signature Pages" prints the Signature Pages, Application Contacts and Scientific Abstract. If you institution wishes to review the application in its entirety, select the "Print Signatures Pages and Attached PDF Files" option.

Obtain required signatures. PanCAN requires that the completed application and Signature Pages with original signatures of the applicant and institutional signing official be uploaded into the Application Documents.

Upload the signed Signature Pages into the application in the "9) Application Documents" section. Do not upload the Application Contacts and Scientific Abstract pages with the Signature Pages.

13. **SUBMIT.** After successfully passing the validate check and printing your documents, click the

'Submit' link. An e-mail will be sent to you confirming your submission.

Once your application is submitted, you may view it by accessing the 'Submitted' link under the Manage Proposals tab. The status column will show "Submitted" and the date submitted. You may need to refresh your browser screen after submitting the application to see the updated status.

CHANGES TO YOUR APPLICATION

Withdrawal of Application. Please advise PanCAN promptly, in writing, should you decide to withdraw your application for any reason. Your letter (or e-mail) should include your name, the title of the proposal, and the reason for withdrawal.

Change of Address. Notify PanCAN in writing of any changes of address, e-mail or phone number, following the submission of an application. Include your name and the application number.

Change of Institution or Position. If you change your institution or professional position, contact PanCAN to determine whether your application is still eligible for review.

INQUIRIES

Inquiries or technical issues regarding proposalCENTRAL and the online application process should be directed to customer support at (703) 964-5840, or toll free at 1 (800) 875-2562, or by e-mail at pcsupport@altum.com.

Inquiries about the grant guidelines and application materials should be directed to PanCAN at grants@pancan.org or (310) 725-0025. Contact Person: Rhonda Aizenberg, PhD, Director, Grants Program.