Instructions for RNAi Screening Proposals

Applicants must hold the rank of Assistant Professor at Case Western Reserve University and be a member of the Case Comprehensive Cancer Center (Case CCC). While investigators may participate in multiple projects, only one application may be submitted from each Principal Investigator. All projects must be focused on the development and use of an RNAi screening approach that is conducted in collaboration with the Case CCC Small Molecule Drug Development Shared Resource, under the leadership of Drew Adams.

Proposals will be limited to 4 pages and include the following:

- Research Plan (up to 3 pages) that includes:
  - Introduction and Specific Aims
  - Identification of the targeted library to be used (only arrayed, targeted libraries such as kinome, druggable genome, epigenetic, phosphatase, etc. will be considered. Full-genome libraries are not responsive to this RFA.
  - A description of feasible screen (assay and controls)
  - A plan for filtering and validation of hits
  - A plan for follow-up studies that are focused on mechanistic evaluation of candidate genes

- Description of Research Team, including the PI’s commitment and expertise to conduct the project as well as a clear description of lab personnel that will work with the core to develop and execute the screen and conduct validation studies. This person is expected to spend at least 50% effort over 1 year to this project and must be funded by the PI’s laboratory (~0.75 page).

- Plans for Future Funding (~0.25 page), including an indication of prior success if previously funded by a pilot grant from the Case CCC.

Additional information that should be submitted, but is not included in the 4 page limit, includes:

- Cover Page that includes the Title, PI, co-PI, Institution(s), Department(s), and all co-investigators
- NIH Biosketches for all key personnel (up to 5 pages each)
- References Cited
- One page of marketing materials from the company from whom the library would be purchased.

Review Criteria:

- The project addresses an innovative question in cancer biology using an RNAi screen with a targeted and arrayed library.
- The proposed screen is feasible and can be adapted to the core facility resources.
- The proposal includes a logical and realistic plan for filtering and validating candidate genes as well as a plan to discern the biological role(s) of the validated genes.
- There is commitment by the PI of the project for independently supporting an 0.5 FTE that will work with the shared resource to develop and conduct the screen.
- The project and research team have a high likelihood for future funding from national sources, including prior demonstration of strong return-on-investment from prior pilot grants.
Obligations of Awardees:

- Acknowledgement of support from the Case Comprehensive Cancer Center in all publications and media releases associated with the supported project.
- Timely submission of data and stewardship reports upon request from the Case Comprehensive Cancer Center.
- Participation in meetings of the aligned program.
- Presentation of Progress in Cancer Center-sponsored symposia.

Please submit all materials to casecccpilots@case.edu by February 26, 2018.