STATION 41 THERAPEUTICS ACCELERATOR: REQUEST FOR PROPOSALS (RFP)

The Station 41 Therapeutics Accelerator is seeking new proposals from interested investigators within the University of Alabama at Birmingham (UAB) to be supported and worked on collaboratively between UAB principals/inventors and Southern Research (SR) applied science units of expertise and biotechnology entrepreneurship mentors.
This program was previously known as the Alabama Drug Discovery Alliance (ADDA). This name is retained for legacy purposes, but our program is now re-branded.

We will have an open and transparent collaboration with the UAB Harbert Institute for Innovation and Entrepreneurship on a shared policy of intellectual property protection emergent from the projects.

We have a new and flexible series of grant mechanisms to choose from and that can be applied to interesting projects. This new structure fits where drug discovery and early preclinical development is today.

What We Require in a Proposal:

A *single, 5-page proposal* will be evaluated for Accelerator support.

- Essential Element 1: Goal, Hypothesis, Aims and Milestones Page (*template is available*)
- Essential Element 2: Critical Path Workflow Diagram (*templates for various grant mechanisms are available*)
  - To be included with the remaining typical grant narrative of Background and Significance, Pilot or Preliminary Data in support, and Approach (Research Design and Methods). A bullet-point listing of key personnel is encouraged.

Cover Letter and NIH "Biosketch" of the PI (and the co-Investigators, if necessary) and References are not included in the 5-page mandate.

Please reach out to Erik Schwiebert, Director, eschwiebert@southernresearch.org or Trey Melazzo, Project Manager, tmelazzo@southernresearch.org to indicate interest in applying and with any questions or concerns. We will provide the templates to interested parties as well as background on this new Station 41 concept and why it is constructed the way it is now.

The RFP will be announced in early February 2024 and the submission window will be wide and forgiving from that announcement date through the end of March 2024 (we are mindful of the other important deadlines in this timeframe). Reach out to Erik for guidance on the application any time.

Review will be undertaken in April 2024 by a small group of SR and UAB scientists bound by confidentiality and guided closely by the Accelerator Director and Project Manager as well as SR's Chief Business Officer. If you feel a CDA is required, please ask Erik and we can put one in place.

Submission of a budget is not necessary. For meritorious proposals, we will work with you on crafting the budget that will be shared by the UAB applicant's laboratory and SR's applied science units supporting the project.

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Appendix: The New Station 41 Therapeutics Accelerator Grant Mechanisms

- **Pre-HTS Assay Design Grant (*$50K for 1 year or less*)**

You may have a compelling drug target for one or more human disease indications with unmet clinical need; however, you need to design and optimize a high-throughput screening (HTS) friendly assay first. The grant is created anew and positioned for this key first step.
Importantly, projects that are successful can progress to either or both mechanisms below.

- **Traditional HTS Critical Path-driven Grant (*$100K-200K over 1-2 years*)**

ADDA's traditional and previously utilized mechanism. However, there is a range of funding support and time, that seeks to fit the complexity of the primary HTS and primary and secondary validation steps. It may be that a combination of active small molecule screening and virtual screening is performed to control costs as well as maximize the chemical diversity of small molecules screened. It will also be guided by a Critical Path of assay steps that is agreed upon by all parties and set in stone before the project begins. This will be a collaborative effort with the expertise from both SR and UAB.

- **Computer Model-driven Drug Discovery and Validation Grant (*$150K for 1 year*)**

New grant mechanism that seeks to capture the emerging discipline of computer-aided drug discovery. This project may not need to use artificial intelligence (AI). It could utilize deep and/or iterative machine learning or computer model-driven or protein structure-driven drug design. The nature of the therapeutic does not have to be a small molecule; it can be an antibody, a peptide, an antibody-drug conjugate, or a large protein therapeutic. This will be a collaborative effort with the expertise from both SR and UAB.
Importantly, projects that are successful in either or both grant mechanisms above may progress to the new added mechanisms below.

- **The Post-HTS Chemistry Optimization (*$150K for 1 year*)**

Grant mechanism intended for those that already have a candidate hit-to-lead or lead therapeutic (also referred as a "pharmacophore scaffold"), that is not optimized. The chemistry could be medicinal chemistry to improve potency while maintaining efficacy and/or it may involve formulation chemistry to improve the solubility ahead of in vivo studies using one or more possible routes of administration. This work is not particularly innovative; however, it is essential to the future success and progression of the lead therapeutic in preclinical development. SR has deep expertise with these important chemistry steps.
Importantly, projects that improve and progress as a result of successful chemistry optimization may progress to the final mechanism below.

- **Accelerator-to-Venture "Bridge" Grant (*$50K for 1 year*)**

We are also discussing the need for the Accelerator-to-Venture "Bridge" Grant to position the project for entry into our Station 41 Venture Studio. Projects will likely require time to reach this step. This mechanism will be reserved for viable projects where a key experiment needs to be performed (for example, in vivo proof-of-concept in an animal model or in vitro PoC in a diseased human cell model) to position the project to seed a new venture. Simply put, if the project is successful, that success drives its progression through the grant types *and* through the Accelerator.

A single project may benefit from as many as 4 "stepwise" grant mechanisms. Our job is to help you navigate these steps and to provide the correct grant fit at the correct time. The ideal outcome is a project that benefits from multiple grant types and seeds a new startup company concept within our Station 41 Incubator or around our Station 41 Hub Concept to augment the Birmingham life sciences and biotechnology ecosystem. The Accelerator will also assess each project continually for the suitable "proof-of-concept inflection point" where a Small Business grant can be sought in parallel, submitted by a newly formed venture or small business concern.