LEUKEMIA & LYMPHOMA SOCIETY®
fighting blood cancers

Request for Proposals

The Leukemia & Lymphoma Society (LLS) Will Continue to Highlight Areas of Unmet Medical Need within the Translational Research Program

The LLS Translational Research Program was created in 1995 with the goal of accelerating clinical applications of laboratory findings relevant to improved diagnosis and management of leukemia, lymphoma, myeloma and other hematopoietic malignancies. In particular, the LLS Research staff and Medical and Scientific Affairs Committee encourage the submission of research proposals that are designed to accomplish one of the following areas:

1. **Define genetic/molecular predispositions to long-term and late-term effects associated with standard therapies in pediatric ALL and apply this information to improve patient outcomes -** The success in the treatment for acute lymphoblastic leukemia (ALL) over the last 30 years has led to numbers of pediatric cancer survivors. However, evidence is increasing that the cure from the primary malignancy is not without long-term physical complications as well as challenges with mental and cognitive health, including brain function/learning skills. LLS seeks to support the translational research needed to identify the molecular components that may predispose a patient to developing long-term and/or late-term effects from cancer chemotherapy, and to develop diagnostic and intervention strategies based on these new understandings.

2. **Development of novel therapeutic strategies for patients with non-cutaneous T-cell lymphoproliferative disorders -** Non-cutaneous T-cell lymphoproliferative disorders represent a diverse set of diseases from the relatively rare and chemo-responsive T-cell lymphomas to the more aggressive and difficult to treat adult T-cell acute lymphocytic leukemias. LLS seeks to support research that will enable a better understanding of the intrinsic biological differences among non-cutaneous T-cell lymphoproliferative disorders that may present therapeutic opportunities, with the goal of developing more effective, tumor-specific treatment strategies. .

3. **Develop novel targeted therapies for CLL patients, with real curative potential -** BTK is predominately expressed in B-cells and is essential for B-cell receptor signaling, chemokine-mediated migration and adhesion, and TLR signaling. The emergence of BCR/BTK inhibitors has increased our understanding of this pathway and has demonstrated its clinical importance. With that said, BTK inhibitors are not curative and

escape mechanisms remain a concern. LLS seeks to support translational research that will identify additional novel targets for CLL and elucidate new therapeutic strategies including, but not limited to, immunotherapy and immunocheckpoint therapy. LLS is particularly interested in studies that use combinations of novel therapies to potentially achieve a cure for this patient population.

4. **Develop novel treatment strategies for MDS patients for whom hypomethylating agents have failed -** MDS is difficult to treat. While the use of hypomethylating agents as a treatment option appears promising, the lack of response/relapse rate is still too high. Therefore, there are few viable treatment options for these patients. LLS seeks to support the translational research needed to identify targets in MDS patients that have failed hypomethylating agents, with the goal of developing new therapeutic strategies for this patient population.

5. **Develop novel targeted therapies for patients with high-risk myeloma -** Approximately 20% of myeloma patients are considered at high-risk of treatment failure as defined by specific cytogenetics, plasma cell leukemia presentations and/or early disease progression. LLS seeks to support the translational research needed to identify key targets in high-risk cases, with the goal of developing more effective therapies including, but not limited to, immunotherapy and immunocheckpoint therapy for this patient population. LLS is particularly interested in studies that use combinations of novel therapies to achieve breakthroughs for this patient population.

6. **Development of new-targeted therapies for indolent lymphoma patients -** Despite advances in treatment, indolent lymphomas are still considered non-curable and available options are primarily cytotoxic agents with significant acute and long-term adverse affects. LLS seeks to support the research needed to identify therapies that target the underlying (and varied) pathophysiology of the disease.

A detailed description of the LLS Translational Research Program and application instructions are available at http://www.lls.org/#/researchershealthcareprofessionals/academicgrants/translationalresearch/. All applications are to be submitted online through FLUXX at https://lls.fluxx.io. Applicants with research proposals that are responsive to the RFP should indicate this on the title page of their Full Proposal. The LLS seeks proposals responsive to the above

requests for proposals, but will also consider other exceptional proposals with the near-term potential of clinical translation.

For additional questions regarding LLS grant programs, eligibility and application processes, please contact Director of Research Administration: researchprograms@lls.org or (914) 821-8301.