2026 Seed Grant Program Request for Proposals (RFP)

The Bloom Syndrome Association (BSA) invites proposals for its 2026 Seed Grant Program to catalyze high-impact research that advances therapeutic development for Bloom syndrome.

These seed grants are intended to de-risk early-stage, milestone-driven projects by generating decision-enabling data within 6–18 months, positioning investigators to compete for follow-on funding from government, foundation, philanthropic, or industry sources.

BSA will prioritize projects that are connected to patient needs, collaborative in design, and capable of leveraging or strengthening BSA-supported research infrastructure, including the International Bloom Syndrome Registry, biobank, reagents, model systems, and clinical/research networks.

Priority Areas for 2026

In 2026, the BSA will prioritize proposals in the following two areas. These priorities were selected because they address urgent clinical risks in Bloom syndrome while also creating actionable entry points for therapeutic development, biomarker discovery, model validation, and future clinical studies.

1. Hematopoietic Biology & Pre-Leukemic Intervention

> Projects that define, detect, or modulate early hematologic dysfunctions and leukemogenesis **in Bloom syndrome**.
>
> Areas of interest: Early biomarkers of hematologic risk (e.g., clonal evolution, genomic instability metrics); Mechanistic studies of hematopoietic stem cell (HSC) instability; Cooperating somatic or inherited genetic alterations that may influence hematologic risk, disease progression, or treatment response; Analyses of treatment response and toxicity in Bloom-associated malignancies; Development of assays or endpoints that could support future clinical studies.
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> Preference will be given to projects that directly inform surveillance or intervention strategies.

2. Variant-Targeted Therapeutic Development

Projects that advance mutation-specific or BLM-restoration strategies with clear translational potential.

Areas of interest: Antisense oligonucleotide (ASO) approaches (e.g., exon skipping, NMD modulation); RNA-based or gene correction strategies; Functional validation of variant-specific therapeutic hypotheses; Mapping of therapeutically addressable mutation classes.

Projects should demonstrate a clear path toward preclinical validation in relevant systems (e.g., patient-derived cells, iPSC models, mouse models).

Additional Areas of Interest

These priority areas are intended to focus the 2026 cycle, not to exclude exceptional proposals that strongly advance BSA's broader therapeutic development goals.

We remain open to exceptional proposals outside the 2026 priority areas, particularly those that: Enable therapeutic development (e.g., models, assays, or datasets); Leverage or expand shared BSA resources; Address clearly defined gaps identified by the patient community in the Patient-Centered Research Strategy.

Examples of Project Archetypes

To guide applicants, below are examples of the types of projects that are well-aligned with BSA research priorities. These are intended to be illustrative, not exhaustive.

Hematopoietic Biology & Pre-Leukemic Intervention

- **Early Detection Biomarkers**: Identification and validation of early hematologic risk markers (e.g., clonal hematopoiesis, mutation signatures, genomic instability metrics) using patient-derived samples or longitudinal datasets.
- **HSC Functional Studies**: Mechanistic interrogation of hematopoietic stem cell instability and leukemogenic transition in relevant model systems.
- **Clinical Data Analyses**: Retrospective or prospective analyses of treatment response, toxicity, or disease progression using real-world data (e.g., de-identified clinical case summaries, Tumor Board-derived insights, EHR abstraction, or other real-world data sources, where appropriately consented and approved).
- **Translational Assay Development**: Development of assays or biomarkers that could serve as endpoints in future clinical studies (e.g., measures of genomic instability or early malignant transformation).

Variant-Targeted Therapeutic Development

- **ASO Design & Validation**: Development and testing of antisense oligonucleotides targeting specific mutation classes (e.g., nonsense variants, splice defects).
- **Functional Rescue Studies**: Demonstration of BLM function restoration in patient-derived cells or iPSC-based systems.
- **Variant Mapping for Therapeutic Tractability**: Systematic evaluation of which mutation classes are addressable by RNA or gene-based approaches.

- **Early Delivery Feasibility**: Initial in vitro or ex vivo evaluation of delivery approaches for RNA- or gene-based strategies, with preference for established or clinically credible delivery modalities.

Funding & Scope

- Typical award: $25,000–$100,000
- Duration: 6–18 months
- Total program funding: Up to $500,000

Please note that these are seed grants intended to support focused, milestone-driven work that unlocks larger follow-on efforts. The BSA invites discussion for programs that require more resources than a seed grant, and mutual exploration of co-funding or fundraising efforts geared for specific programs.

Eligibility

Applications may be submitted by investigators at academic, nonprofit, clinical, or research institutions. Collaborative proposals are encouraged, including projects that bring new expertise into Bloom syndrome research. International applicants are welcome, subject to the BSA's ability to make awards in compliance with applicable laws and institutional requirements.

Application Components

Applicants should use the BSA template (below), which includes:

- Lay summary (accessible to patient community)
- Research plan (≤3 pages)
- Alignment with BSA patient-centered research strategy
- Patient engagement plan
- Clear articulation of next funding steps
- Budget and justification

Review Criteria

Applications will be evaluated on:

- Alignment with BSA priorities and patient needs
- Scientific and technical merit
- Translational potential
- Feasibility within the grant period

- Strength of collaboration (if applicable)
- Clarity of path to follow-on funding

Submission Process

- Submit a single PDF via admin@bloomsyndromeassociation.org with the subject line: "2026 Seed Grant Application – [PI Last Name]".
- **Deadline: Sunday, June 21, 2026, at 11:00 PM Pacific Time.** Late applications may not be reviewed.
- Decisions expected: early August 2026, in coordination with the 2026 Bloom-Rx: Bloom Syndrome Research & Clinical Exchange, held in conjunction with the BSA's 2026 Blossoming Hope Patient & Family Conference.
- Questions may be directed to admin@bloomsyndromeassociation.org. Prospective applicants are encouraged to contact the BSA in advance if their project requires access to BSA-supported data, biospecimens, model systems, or community engagement.

BSA Partnership Approach

The BSA is not only a funder, but a partner in enabling research. Awardees will have opportunities to: Engage with the patient community; Access emerging resources (International Bloom Syndrome Registry, biospecimens, clinical insights); Connect with other researchers in the ecosystem, including at the 2026 Bloom-Rx.

The BSA is committed to supporting projects that can serve as catalysts for therapeutic development and future clinical impact for longer and healthier lives.

Seed Grant Application Template

1. **Project Title**
2. **PI (and Co-PIs, if any), and associated institutions and contact details**
3. **Lay summary/overview of proposed research (2-3 paragraphs)**
    - What is the proposed work to be done, and why is it important?
    - How long will it take?
    - How much funding will it take? Does it require other resources (e.g. patient samples, data, etc.)?
    - If successful, what would the outputs of your research be?
4. **Project's connection to BSA patient-centered research strategy (PCRS)**
    - Which section of the strategy does your work relate to?
    - Which problem or question is your work trying to address?
    - If not included in the PCRS, what other evidence points to this being a patient need?
5. **Patient Engagement (1 paragraph)**
    - In what ways have you collaborated (or in what ways will you commit to collaborating) with the patient & family community via the Bloom Syndrome Association?
6. **Research Plan (No more than 3 pages)**
    - **Background:** what is known in this area that informs your work, why is this work needed?
    - **Goals & Objectives:** what are your ultimate goals for this project, and what are the objectives (in the time period of this seed grant) that will enable you to reach those goals?
    - **Work plan:** what work will be done to meet these objectives, and by whom?
    - **Potential next steps in research, and funding to support it:**
        - *Note: we expect that these seed grants will be the basis of follow-on third-party funding; please be explicit on which objectives will be met under this grant vs. those that will need to be funded at a later point*
        - If successful, what would the continuation/next steps of this project be?
        - Which organizations and opportunities (be specific) would be potential funders, and what are your plans for applying for follow-on funding?

7. **Resources & Requirements**
    - **Funding:** How much funding is needed for this grant, and how will the funding be used? (Please provide a budget using attached template.)
    - **Personnel:** Have you identified qualified personnel to complete this project within the grant period? If so, please list. If not, please provide your plan to do so.
    - **Other resources:** Do you require access to reagents, animal models, patient blood/tissue samples, IRB/ethical board approvals, and/or equipment necessary to complete work? *Note: Projects involving human participants, identifiable or coded human data, biospecimens, animal models, or regulated research materials must obtain all required institutional approvals before funds are released or before the applicable work begins. Applicants should describe any required IRB, ethics committee, IACUC, MTA, DUA, or other approvals and agreements, including expected timelines.*
8. **Bibliography**

Budget Template

Please break out items by individual components (e.g. list out individual personnel, supplies, equipment items, etc.). **Indirect costs are permitted up to 10% of total direct costs.** Travel may be included when directly relevant to the project, such as collaboration meetings, sample transfer, training, or presentation of project results.

Budget Category	**Budget**	**Comments**
Personnel		
Wages	$ -	
Fringe	$ -	
Total Personnel	$ -	
Non Labor	$ -	
Supplies	$ -	
Travel	$ -	
Equipment	$ -	
Sub Contract	$ -	
Total Non Labor	$ -	
Total Direct Costs	$ -	
Indirect Costs (10%)	$ -	
Project Total	$ -	