GLOBAL LEUKODYSTROPHY INITIATIVE

A Rare Diseases Clinical Research Network Consortium

The Global Leukodystrophy Initiative
Clinical Trials Network (GLIA-CTN)
3615 Civic Center Blvd. ARC 516H
Philadelphia, PA 19104

GLIA-CTN Career Development Award
FY23 Request for Applications

I. Award Purpose

The Global Leukodystrophy Initiative Clinical Trials Network (GLIA-CTN) is a consortium of institutions, clinicians, scientists, and patient advocacy leaders working together to promote advances in the diagnosis and treatment of leukodystrophies.

Recognizing the importance of creating a sustainable infrastructure for collaborative research and excellence in clinical care, the GLIA-CTN Career Development Committee seeks to provide resources and mentorship for junior investigators with a demonstrable interest in, and commitment to, patient-oriented research in the leukodystrophies.

The GLIA-CTN Career Development Award is a mentored award designed to provide "protected time" for clinically trained individuals to receive supervised training in biomedical research related to leukodystrophies. A long-term goal is to establish a Leukodystrophy Center at each award recipient's local institution. The award supports a period of supervised research, in conjunction with career development opportunities, for physician-scientists who require additional mentored training and support during development of an innovative research project.

The award is intended to prepare the candidate to successfully submit a competitive NIH Career Development (K) Award, or equivalent, by the end of the funding period of their GLIA-CTN Career Development Award. Eligible candidates must not have an existing mentored K award; however, concurrent R25, K12, or equivalent early career awards are acceptable.

Given the intent to support and foster investigators establishing new leukodystrophy centers, priority will be given to investigators at institutions *not currently participating* in the Global Leukodystrophy Initiative Clinical Trials Network (GLIA-CTN).

II. Application Deadline

Applications must be received no later than **February 20, 2023**.

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III. Number of Awards

One GLIA-CTN Career Development Award will be awarded in FY23.

IV. Award Period

Support will be provided for a **one-year** project.

V. Level of Support

The GLIA-CTN Career Development Award will provide **up to $85,000** for research and salary, inclusive of fringe and indirect costs. We recommend that the applicant ask for a waiver of indirect costs. No greater than 8% indirect costs are permitted.

VI. Eligibility Criteria

Candidates for the award must have a doctoral degree within the health professions (e.g., MD, DO, DDS, DMD, OD, DC, PharmD) and be actively affiliated with a US-based academic and/or health care institution. Individuals with degrees in nursing research and/or practice, who are licensed to practice clinically, may be eligible. There are also certain circumstances in which individuals with a PhD may be eligible, outlined below.

Innovative, early-stage applications addressing key knowledge gaps that are without evidence of alternate means of funding (i.e., "high-risk/high-yield") are encouraged.

Eligible applications will meet the following *key criteria*.

i. The application must relate to a specific established leukodystrophy (Vanderver et al., Mol Genet Metab. 2015; doi: 10.1016/j.ymgme.2015.01.006);
ii. The application should include a preliminary feasibility assessment for the creation of a leukodystrophy center at the applicant's institution. Preference will be given to applications that include an institutional letter of support to provide matching funding and resource allocation for the creation of such a center, including clinical care, diagnostic, and research resources that address the unique needs of patients with inherited white matter diseases;
iii. The applicant must have adequate training to care for patients with leukodystrophy;
iv. The application must include a pathway to additional funding or a subsequent career development award;
v. Although applicants must identify mentorship within the GLIA-CTN, co-mentorship beyond the GLIA-CTN will be permitted if appropriate to the scientific goals and academic development of the applicant;

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vi. The applicant must demonstrate willingness to collaborate with the GLIA-CTN in a sustainable way, including adoption of centralized/standardized data collection tools managed by the GLIA-CTN Data Integration Core (DIC);
vii. The applicant must be within five years of completion of last training (i.e., last clinical or research fellowship);
viii. Applicants holding a PhD only must demonstrate integration with the clinical team at their site, as well as partnership with clinicians to facilitate the establishment of a local Leukodystrophy Center.
ix. The applicant must describe scientific methods that demonstrate adequate rigor and replication to translate the proposed research project into future clinical studies (i.e., description of alternative approaches or "Go/No-Go" criteria).

Applications should also meet the following *feasibility criteria*.

i. The applicant must demonstrate approval by their local Institutional Review Board (IRB) and, if appropriate, their Institutional Animal Care and Use Committees (IACUC) prior to accepting award funding.
ii. For projects involving interventional approaches, the application must include a protocol synopsis and evidence of submission to appropriate regulatory bodies prior to submission.

VII. International Applicants

Please note that this time, only **US-based investigators are eligible to apply** for funding through a GLIA-CTN Career Development Award. We hope to be able to include international applicants in future award cycles. In the meantime, alternative funding mechanisms may be available to support international researchers interested in proposing a new project or collaborating on an existing project within one of the key disease areas outlined in **Appendix A**.

Please contact GLIA-CTN Program Manager, Omar Sherbini, MPH, at email@theglia.org or 215-590-3068 for additional details.

VIII. Institutional Commitment

Successful applications will include an institutional letter of support outlining matching funding and resource allocation for the creation of a Leukodystrophy Center. Please see **Section VII (Eligibility Criteria)** for details.

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IX. Resource Utilization

Applications that include a plan to leverage central GLIA-CTN resources in one or more of the following ways will be prioritized:

- Use of existing phenotype and longitudinal natural history previously collected through the consortium's central repository, known as the Myelin Disorders Biorepository Project (MDBP);
- Use of banked and/or prospectively collected biospecimen obtained by one or more clinical research centers currently participating in the GLIA-CTN;
- Inclusion of one or more GLIA-CTN Principal and/or Site Investigators in project design and/or execution;
- Inclusion of one or more GLIA-CTN Advocacy Committee members or organizations in project design and/or execution.

X. Reporting Requirements

- A progress report will be expected at 6 months following award, and a final report will be expected at 12 months following award.
- Funds will be disbursed at the end of each 6-month reporting period.
- Publication in the form of an abstract at a national or international meeting or submission of a manuscript for publication is expected within 12 months of completion of the award.
- The awardee is expected to attend, and be prepared to discuss their career development project, at the GLIA-CTN Annual Instigator Meeting (Summer 2023), and attend the next GLIA Scientific Meeting (Spring 2024) after completion of their award.

XI. Data Sharing Requirements

IRB/IACUC protocols must include language that permits protected health information (PHI) to be shared with the Children's Hospital of Philadelphia (CHOP), and with the Rare Diseases Clinical Research Network (RDCRN) Data Management and Coordinating Center (DMCC) designated by the National Institutes of Health.

XII. Suggested Application Structure

- **Project Proposal (2-3 Pages):** Background, Innovation, Approach (inc. Specific Aims, Preliminary Data and Methods), Project Timeline, and Future Directions;
- **Career and Program Development (2 Pages):** Candidate Background and Goals, Training Objectives, GLIA-CTN Mentor, Coursework and Seminars,

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Leukodystrophy Program Development, Program Structure, and Future Development

- **Bibliography (1 Page)**

XIII. Review Criteria

- Does the application meet the eligibility requirements?
- Does the proposed research have the potential to improve care of patients?
- Have efforts been made to connect with leaders in advocacy organization(s) related to the disease(s) of focus in the application, or is there a clearly outlined plan to do so?
- Are the aims well defined?
- Is the approach innovative?
- Are the methods appropriate?
- Will the collected data answer the stated aims?
- Is the budget adequate and the timeline realistic?
- Is there strong institutional support for creation of a local Leukodystrophy Center?

XIV. Review Process

- Applicants will submit a first-round application for review by the GLIA-CTN Career Development Committee. Feedback will be provided to all applicants.
- Applicants with strong proposals will be invited to incorporate the Committee's feedback and submit a revised application for a second round of review.

XV. Disorders/Topics of Interest

Proposals focused on leukodystrophies with patient advocacy representation, listed below for reference, will be given priority during the review process. Applicants interested in focusing on leukodystrophies not included on the list below are encouraged to contact the GLIA-CTN Career Development Committee prior to submission of a new application.

XVI. Questions

Questions regarding the application requirements, submission guidelines, etc. may be directed to GLIA-CTN Program Manager, Omar Sherbini, MPH at email@theglia.org or 215-590-3068.

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Appendix A - FY23 Career Development Award Areas of Interest

Adult-Onset Autosomal Dominant Leukodystrophy (ADLD)	Leukoencephalopathy w/Brain Stem and Spinal Cord Involvement and Lactate Elevation (LBSL)
Adrenoleukodystrophy (ALD)	Leukoencephalopathy with Calcification and Cysts (LCC)
Adrenomyeloneuropathy (AMN)	Metachromatic Leukodystrophy (MLD)
Aicardi-Goutières Syndrome (AGS)	Multiple Sulfatase Deficiency (MSD)
Adult-Onset Leukoencephalopathy w/Axonal Spheroids and Pigmented Glia (ALSP)	Pelizaeus-Merzbacher Disease (PMD)
Alexander Disease	Pol III-related Leukodystrophy (4H)
Canavan Disease	Refsum Disease
Cerebrotendinous Xanthomatosis (CTX)	Salla Disease
Hypomyelination w/Brainstem and Spinal Cord Involvement and Leg Spasticity (HBSL)	TUBB4A-related Leukodystrophy
Krabbe Disease	Vanishing White Matter Disease (VWM)

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