CURE EPILEPSY CATALYST AWARD

CURE Epilepsy's grant programs seek to accelerate promising research leading to new treatments and cures for people living with epilepsy. We prioritize highly innovative, risky, paradigm-shifting projects that address our mission to cure epilepsy, affirming our core belief that the only acceptable final goal is "no seizures, no side effects."

CURE Epilepsy's mission is to fund breakthrough research that will transform the lives of people with epilepsy as we lead the search for a cure.

We identify and fund cutting-edge research that may lead to new approaches for curing epilepsy, challenging scientists worldwide to collaborate and innovate in pursuit of this goal. Our commitment is unrelenting.

We encourage applications from groups identified as nationally underrepresented in the biomedical sciences. These groups include individuals with disabilities, veterans, persons from underrepresented racial and ethnic groups and gender-diverse groups, women in biomedical-related disciplines, or any other characteristic protected by federal, state, or local law.

Researchers outside the U.S. are encouraged to apply. U.S. citizenship is not required.

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PRIORITY AREAS

CURE Epilepsy funds research that has the potential to truly transform and save lives. The purpose of this funding opportunity is to stimulate and accelerate discovery and development of new, transformative therapies for epilepsy, moving promising, well-supported preclinical and/or clinical research closer to clinical application. The award is intended to support the nimble development of data necessary to attract larger commercialization funding opportunities and is not intended to replace those opportunities. Projects based on novel biological pathways and/or highly differentiated therapeutic approaches which are likely to have a high probability of successfully transitioning to clinical development are strongly encouraged. **The award is not intended to fund basic research on the mechanisms underlying epilepsy**.

This funding mechanism prioritizes projects that advance research to clinical trial readiness. This includes the development of biomarkers and optimization of promising new entities with established proof-of-concept to improve pharmacokinetics/pharmacodynamics, safety profiles, and/or formulations to advance these new entities further in development.

Prospective pilot clinical trials where limited testing of a novel intervention is needed to inform the next step in translational research are encouraged. Projects adding critical data to ongoing or funded clinical studies will also be considered, provided the request does not duplicate existing funding.

Applications MUST provide data demonstrating proof-of-concept in an epilepsy model for the entity being developed. Applications lacking this data will not be evaluated.

Priority areas include:

- Innovative approaches to prevent, modify and/or arrest the development of acquired epilepsy.
- Development of novel approaches to prevent the onset or halt the progression of severe pediatric epilepsies.
- New, effective treatments for the >30% of the epilepsy population who are pharmaco-resistant.
- Translational or clinical approaches aimed at normalizing sleep disturbances or circadian rhythms to treat seizures.

- New approaches, biomarkers, or therapies to predict and/or prevent SUDEP.

ELIGIBILITY REQUIREMENTS

This award is available to independent researchers at or above the level of Assistant Professor (or equivalent) at universities and non-academic research institutions, including small biotechnology companies, who seek to develop new interventions for epilepsy. International applicants are welcome. Postdoctoral fellows may not apply for this award. All materials must be submitted in English.

FUNDING CYCLE DETAILS

ACTIVITY	KEY DATES
Open Call for Letters of Intent	Tuesday, May 13, 2025
Letter of Intent Deadline	Tuesday, June 10, 2025, 9pm ET
Full Proposal Invitations	Monday, July 28, 2025
Full Proposal Deadline	Tuesday, September 2, 2025, 9pm ET
Anticipated Award Notification	December 2025-January 2026
Anticipated Project Start Date	Spring 2026

BUDGET INFORMATION

Funding requests must be itemized and based on specific, milestone-based scientific aims. Requests may be made for up to a maximum of $250,000 paid over 2 years. Proposals of lesser amounts and shorter duration that will accomplish key milestones needed for clinical advancement are strongly encouraged. CURE Epilepsy reserves the right to fund only select specific aims or stage funding of proposals based on achievement of milestones.

Budgets may include salary support for the Principal Investigator (PI), technical staff and/or co-PIs, supplies, animal costs, vendor costs, limited equipment costs, and travel to an epilepsy-related conference only if the PI is presenting his/her CURE Epilepsy-funded research. Indirect costs are not supported.

LETTER OF INTENT INSTRUCTIONS (3-PAGE LIMIT)

All applicants must submit a Letter of Intent (LOI). The LOI should clearly and succinctly outline the specific aims and include a brief description of the justification and research plan according to the guidelines in this announcement.

Letter of Intent Instructions:

Below are instructions for the required scientific summary and future directions sections, which together can be no longer than three pages in length. **Proof-of-concept data, in an epilepsy model, demonstrating validity and efficacy of the approach, biomarker, treatment entity or device are required**. LOIs exceeding three pages of text will not be reviewed.

1. **Scientific Summary:** Clearly and succinctly outline the milestone-based specific aims and anticipated outcomes based on go/no-go criteria. Include a brief description of the proposed research plan and explain how it aligns with the intent of this funding mechanism (1 ½-page maximum).

2. **Proof-of-concept data:** Data demonstrating, in an epilepsy model, a) the validity of the approach and, b) showing the value of the entity being developed **must** be presented. LOIs lacking this information will not be considered (1 page maximum).

3. **Future Directions:** Describe what next steps will be taken once the goals of your proposed project have been achieved (1/2-page maximum). This must include clear steps to critical next stages in the development process such as scale-up, engagement of a patient cohort, and a potential funding plan.

A few points to note:

- Lower scores will be given to proposals that are not milestone-based with stated go/no-go criteria that are achievable within a 2-year timeframe.
- Graphs and charts are highly recommended.
- Literature references are not required at the LOI phase. However, if you decide to include references, they do not count towards the page limit.

FORMATTING GUIDELINES

ITEM	DETAILS
Font	Use an Arial, Helvetica, Palatino Linotype or Georgia typeface, a black font color, and a font size of 12 points or larger.
Figures, Tables, and Graphs	You may use a smaller type size, but it must be in a black font color, readily legible, and follow the font typeface requirement. Color can be used in figures, but all text must be in black font.
Spacing	Single-spaced between lines of text, no more than five lines of type within a vertical inch. Margins: Minimum of 0.5-inch top, bottom, right and 1-inch left.

LETTER OF INTENT PROPOSAL CENTRAL INSTRUCTIONS

LOIs must be submitted through Proposal Central (https://proposalcentral.altum.com). To begin an application, applicants will need to create a professional profile, if one does not already exist.

Instructions for each section of the application in Proposal Central:

1. **Title Page:** Enter the proposal title (maximum 150 characters, including spaces).

2. **Download Templates and Instructions:** Download guidelines and other available instructions (if provided) as needed.

3. **Enable Other Users to Access this Proposal:** Use this optional section to grant access to a collaborator or co-investigator.

4. **Applicant/Principal Investigator (PI):** This section should auto-populate from the applicant's professional profile. Double-check that the information is complete and correct. If it is not, click Edit Professional Profile to update the information. Indicate whether you are an early-career or established investigator.

5. **Institution and Contacts:** Information should auto-populate from the

applicant's profile.

6. **Co-Principal Investigator/Collaborators:** Please enter information for any co-investigators or collaborators, if applicable.

7. **Keywords:** Select at least 3 keywords from the list that best describe the specific focus of your research proposal.

8. **Current and Pending Support:** List all current and pending support for you and any co-investigators. Pending support includes any grant applications that you have submitted, but for which decisions have not yet been communicated. Current and pending support is required for the PI and co-PI but is not required for collaborators.

9. **Upload Attachments:** Once the LOI is finalized, attach it by uploading the PDF into this section of ProposalCentral.
   Biosketch for PI: Applicants may use NIH biosketch format if preferred over the provided template. **Please include a statement that clearly describes your interaction(s) with an epilepsy-related patient community and how your proposed work will benefit them.**

   Optional
   - Applicants are encouraged to provide statements regarding their commitment to fostering diversity, equity, and inclusion in their research environment (100 words or less).
   - Applicants may include within their biosketch a ½ page section describing any life events or circumstances that contributed to delays or gaps in their career trajectory. This may include information that may not otherwise be apparent to reviewers and can help provide context as they evaluate your professional trajectory and achievements. Examples include but are not limited to; being a member of a community underrepresented in biomedical research, having experienced a life event that impacted career trajectory (such as parenthood, family, or medical leave), COVID-19 pandemic-related effects, having a learning or other disability, coming from a low-income family, and being the first in your family to go to college.

10. **Validate:** The system will check for required components that have not been completed. Applicants will not be able to submit until all required components are completed.

11. **Submit:** Click Submit after your application has been successfully validated.

FULL PROPOSAL NARRATIVE INSTRUCTIONS (10-PAGE LIMIT*)

Invited applicants should submit full proposals and include the following in the proposal narrative:

Specific Aims: Clearly state the specific aims that will be addressed by this work, e.g., improved selectivity, specificity or pharmacokinetics of a new entity based on established proof-of-concept of an existing entity, improved safety or formulation, validation of a biomarker that will enable clinical testing, etc. Each specific aim should be associated with a clearly articulated, measurable milestone in the development process and be defined by clear go/no-go criteria. Each aim and milestone must have a clearly identified budget.

Background: Describe the project background including the biological rationale and patient population for which the transformative research is intended. Describe how the proposed approach is significantly different from existing approaches to treatment or will significantly enable treatment or prevention strategies.

Preliminary Data: Provide preliminary data including but not limited to the following: potency, selectivity, sensitivity, oral bioavailability, pharmacokinetics, efficacy against stated specific endpoints or outcome measures, and/or preliminary safety/toxicology data that are available at the time of submission.

Research and Development Plan: Describe the specific experiments that will be done to address each specific scientific milestone including details of research design, methods, and endpoints in sufficient detail for scientific peer review. Specifically:

- Describe the experimental paradigm including specific endpoints that will clearly differentiate the new entity or therapeutic approach from existing approaches. Provide a justification for those endpoints and describe how data will be collected and statistically analyzed. As appropriate, provide key assay metrics that help establish go/no-go decision criteria, for example, measures of assay sensitivity, specificity, and reproducibility. Include a power analysis to demonstrate that sample size is appropriate.
- Articulate expected outcomes with outcome metric(s) and clear go/no-go criteria for each milestone, how results will be interpreted, and note

potential pitfalls.

- Describe key collaborations and expertise that will help ensure the appropriate advancement of the work.
- Regardless of the stage of work, applicants must present a plan that describes availability of and access to a suitable patient population that would support meaningful progression of the work. Access to patients may be enabled through patient advocacy groups, specific clinical consortia, inpatient populations, etc.
- If human subjects will be included, describe the plan for recruitment over the course of the study as well as inclusion/exclusion criteria and the process for seeking informed consent. Identify all study risks and safety measures that will be utilized to minimize risk to human subjects and study personnel.
- Applicants must clearly describe the steps that will be taken to advance the intervention/approach into the next stage of development including potential funding mechanisms following conclusion of the work proposed in this award. Strong consideration will be granted to applicants who can provide specific regulatory milestones, e.g., submission of an application to the FDA for obtaining Investigational New Drug (IND) approval and a feasible plan for achieving milestones.
- If aspects of the project have been reviewed by another funding agency but not funded because of articulated gaps in the research plan, applicants are encouraged to submit prior review summary statements and describe how the revised proposed plan will address those gaps.
- CURE Epilepsy strongly encourages the use of Common Data Elements (CDEs) in your research. Pre-clinical CDEs increase rigor, data standardization, and transparency across research studies. *Guidance for Integration in Grant Proposals*: Researchers should include in their proposal, where applicable, the procedure specific CDEs that will be used in their pre-clinical studies. An example of the language is suggested below:
  "Data collection for all *in vivo* experiments were captured using Case Report Forms (CRFs) specific to each procedure. CDEs that will be used are listed and recorded as a supplemental file". Files can be uploaded in any appropriate format to the proposal narrative and other attachments section as explained below. Examples of data standardization tools can be found here for the relevant pre-clinical CDEs. https://cureepilepsy.org/research-resources/.

Statement of Relevance to CURE Epilepsy's Mission and the Intent of this Funding Mechanism: Include one paragraph detailing how the proposed research addresses CURE Epilepsy's goal of curing epilepsy through transformative,

clinically translatable research and/or clinical research.

References: Please list all literature cited within the proposal. References do not count toward the page limit.

Proposals will be evaluated for innovation, feasibility, scientific merit, application to clinically relevant steps of translational research and potential to be transformative.

*The 10-page limit of the Proposal Narrative is inclusive of figures, tables, graphs, photographs, diagrams, chemical structures, pictures, pictorials, and other relevant information needed to judge the proposal.

FORMATTING GUIDELINES

ITEM	DETAILS
Font	Use an Arial, Helvetica, Palatino Linotype or Georgia typeface, a black font color, and a font size of 12 points or larger.
Figures, Tables, and Graphs	You may use a smaller type size, but it must be in a black font color, readily legible, and follow the font typeface requirement. Color can be used in figures, but all text must be in black font.
Spacing	Single-spaced between lines of text, no more than five lines of type within a vertical inch. Margins: Minimum of 0.5-inch top, bottom, right and 1-inch left.

FULL PROPOSAL INSTRUCTIONS FOR PROPOSAL CENTRAL

Full proposals must be submitted through Proposal Central (https://proposalcentral.altum.com). To access your application, log in to Proposal Central and go to the Manage Proposals tab. Below are instructions for each section of the online application:

1. **Title Page:** Enter proposal title (maximum 150 characters, including spaces).

2. **Download Templates and Instructions:** Access a copy of these guidelines

and download a biosketch template if you have not already completed one. Instructions for completing your ORCID ID are also provided in this section.

3. **Enable Other Users to Access this Proposal:** Use this optional section to grant access to co- investigators or collaborators, so they may review or enter information into the application.

4. **Applicant/PI:** This section should auto-populate from the professional profile. Double-check that the information is complete and correct. If it is not, click Edit Professional Profile to update the information. Indicate whether you are an early career or established investigator. CURE Epilepsy now requires an ORCID ID with all full proposal submissions. If your ORCID ID is not already provided on this page, enter your identifier in your Professional Profile by clicking Edit Professional Profile. Detailed instructions may be accessed in Step 2 of the on-line application – Download Templates and Instructions.

5. **Institution and Contacts:** Information should auto-populate from your profile.

6. **Co-Principal Investigator/Collaborators:** Enter contact information for co-PIs and/or collaborators. Typically, Co-PIs are co-funded by the grant whereas collaborators are not.

7. **Abstract and Keywords:** Answer the questions in each box according to the instructions below:

    a) Lay Summary: The lay summary will be reviewed by a person with lived experience of epilepsy. Please take special care to describe the proposed work and its potential to contribute to the development of a transformative therapy in language appropriate for a non-scientific audience. Your summary MUST include each of the following sections.

        i. Background and Rationale.
        ii. Goals: include any overarching or long-term goals.
        iii. Methods: briefly explain how the project will be performed avoiding excessive technical detail.
        iv. Deliverables: explain what output is expected at the successful completion of the project.

v. Potential Impact: briefly explain how the work, if successful, will contribute a new, transformative treatment or prevention that improves the lives of those with or at risk for epilepsy. In this section, you may also explain the next steps in your research plan once the goals of your proposed project have been achieved.

b) Scientific Summary: Please provide a brief (250 word) scientific abstract of your project.

c) Keywords: Please select at least three and no more than seven keywords that are appropriate to the proposed project. The keywords will be used to align proposals with appropriate scientific peer reviewers.

8. **Specific Aims and Milestones:** Each specific aim should have a clearly defined outcome or milestone. For example, a specific aim testing the efficacy of a novel therapy in-vivo might have a milestone such as: Identify a novel compound that results in >50% seizure reduction in at least 40-60% of treated animals after 3 months of treatment. For each aim and associated milestone enter a short and long description.

9. **Aims and Milestones Schedule:** Enter budget, start date, and end date for each specific aim and associated milestone. Each specific aim should be associated with only one milestone. Do not enter multiple milestones per specific aim. The dates for different milestones can be overlapping.

10. **Budget Period Detail:** The maximum budget for this award is $250,000 US dollars (USD) over 2 years. Provide a detailed budget that is itemized and aligned with the specific aims and milestones identified in the proposal. Enter the proposed start and end date for Period 1. Enter funds for personnel costs using the template provided. For each personnel item entered, indicate the milestone(s) that will be associated with that item. Click Save to save changes. The system will automatically calculate total cost for the section. Next, enter non-personnel costs for each category listed e.g., materials, supplies, travel, disposables, etc., using the template provided. Vendor costs (if work will be sourced to a third party) can be included in the 'Other Expenses' category. Leave category blank if no expenses exist for that category. For each item entered, indicate the milestone that will be associated with that item. Please note that there is a travel cap of $1,500 USD for international applicants and $1,000 USD for U.S. applicants per year, which can be budgeted for a maximum of 2 investigators (the PI and Co-

PI). Limited equipment purchases that are required to complete goals will be considered but must be clearly justified in the next section.

Repeat steps above for Period 2. The 'copy Period 1 Forward' tab allows you to copy expenses entered in Period 1 into Period 2 and then edit as needed. Please note that indirect costs and institutional overhead are not provided. Funds cannot be used to cover institutional expenses such as network charges, computer maintenance and services, insurance dues or other miscellaneous expenses not directly related to performing the project. All expenses must be converted to U.S. dollars (USD).

11. **Budget Summary and Justification:** Review the summarized budget to ensure that details have been entered correctly. Provide a budget justification that clearly details how and where the funds will be used and why these expenditures are critical to the success of the proposed research.

12. **Current and Pending Support:** Enter all current and pending support for all PIs on the proposal. Please indicate if there is any overlap with the proposed work.

13. **Organization Assurances:** Answer the questions regarding use of human subjects, animals, recombinant DNA, and the possession of a Schedule 1 license should the work involve Schedule 1 substances.

14. **Proposal Narrative and Other Attachments:** Upload the following documents:

    a) Proposal Narrative.

    b) Facilities/Institutional Assurances (do not exceed ½ page): Provide a description of facilities available at the institution(s) where the work will be performed. If an institution does not have an official assurance document, please provide, in writing, assurances from the department chairperson or practice colleagues confirming the applicant's time, facilities, and future position, if research is funded. Please submit facilities/institutional assurances for each PI.

    c) Biosketch for PI: Applicants may use NIH biosketch format if preferred over the provided template. Please include a statement that clearly describes your interaction(s) with an epilepsy-related patient

community and how your proposed work will benefit them.

Optional

- Applicants are encouraged to provide statements regarding their commitment to fostering diversity, equity, and inclusion in their research environment (100 words or less).
- Applicants may include within their biosketch a ½ page section describing any life events or circumstances that contributed to delays or gaps in their career trajectory. This may include information that may not otherwise be apparent to reviewers and can help provide context as they evaluate your professional trajectory and achievements. Examples include but are not limited to; being a member of a community underrepresented in biomedical research, having experienced a life event that impacted career trajectory (such as parenthood, family, or medical leave), COVID-19 pandemic-related effects, having a learning or other disability, coming from a low-income family, and being the first in your family to go to college.

d) Co-Investigator Biosketch: Upload biosketch for each co-investigator, if applicable.

e) Collaborator Letters of Support: Upload letters from collaborators indicating their support of the proposed work, if applicable.

f) Informed consent form: If a clinical trial is included as part of the research plan, the applicant conducting the trial must provide a copy of the informed consent form used to enroll subjects.

g) Timeline for execution of the studies: In a simple graphic, depict the timeline for accomplishing each specific aim and milestone.

h) Signed signature pages: Upload signed signature pages, which are generated in Step 15 of the application.

15. **Validate:** The system will check for required components that have not been completed. You will not be able to submit until all required components are completed.

16. **Signature Pages:** Click Print Signature Page to obtain a PDF of the document that needs to be signed by you (the submitting PI) and an

institutional representative. After signatures have been collected, scan and upload to Section 14.

17. **Submit:** Please make sure to Click Submit once your application has been validated by the system.

Inquiries: Questions regarding these guidelines are welcome and should be directed to the Research Team at Research@CUREepilepsy.org or 312-255-1801.