

JUNIOR INVESTIGATOR RESEARCH AWARD

Application guidelines updated as of July 15, 2024

BACKGROUND AND PURPOSE

Junior Investigator Research Awards support epilepsy research by recently independent investigators and are intended to facilitate successful competition for subsequent longer-term support from the NIH or other sources. Proposals are welcome across the spectrum of basic, translational, or clinical research into the causes, treatment, and consequences of epilepsy, seizures, and related disorders and their treatment.

This award provides up to \$75,000 for one year to support the direct costs of research. In addition, the award includes complimentary registration to the AES Annual Meeting and one year of complimentary membership to AES. The number of awards granted each year is contingent upon available funds.

SUPPLEMENTARY TRAINING GRANTS

Applicants to the Junior Investigator Research Award have the option of applying for an additional supplementary training award to attend a high-quality training course or conference that will supplement the training received during their award. Virtual or in-person training opportunities may be considered. Applications for this supplemental support must be submitted alongside the Junior Investigator Research Award but will not affect the likelihood of receiving an award.

CONTRIBUTING PARTNERS

If you grant permission during your application process, your application and related reviewer critiques may be confidentially shared with other funding organizations. AES is proud to partner with other philanthropic organizations to make dollars go further to support epilepsy researchers. Some partners commit to full funding of at least one competitively reviewed proposal; other partners will co-fund with AES if a proposal aligned to their mission also competes successfully for AES co-funding. Partner organizations, their funding priorities, and anticipated level of support are available online.

APPLICATION DEADLINES AND AWARD DATES

- September 2024: Application submission opens through ProposalCentral
- January 16, 2025: Full proposals due
- By May 31, 2025: Awardees notified
- July 1, 2025: Earliest award start date. May be delayed up to 3 months. (October 1, 2025)

APPLICATION POLICIES

- 1. Prior unfunded applicants may reapply, but all applications will be treated as new submissions.
- 2. An individual may only serve as the primary mentor for one application across all mentored award programs including the Predoctoral Fellowship, Postdoctoral Fellowship, Research & Training Fellowship for Clinicians, and Epilepsy Study Consortium Mini-Grants. Similarly, an individual may not apply for a Junior Investigator Research Award and also be listed as the primary mentor on a proposal for a mentored award.



- 3. More than one application may be submitted from a single institution, but final funding decisions will take into account a preference to limit multiple awards to one institution.
- 4. Applicants may request a delay in the start date of up to 3 months.

ELIGIBILITY CRITERIA

<u>Ineligible proposals will not be reviewed</u>. If you have any questions regarding your eligibility, please contact AES Grants Staff at <u>grants@aesnet.org</u> before submitting a proposal.

Applicants must:

- 1. Hold a MD, DO, PhD, ScD, PharmD, RN, or equivalent degree.
- 2. Have an academic appointment at the level of Assistant Professor or equivalent at a university, medical school, research institution, or medical center. Researchers with other early faculty appointments (such as Instructor, Adjunct Track, etc.) may apply but are strongly encouraged to provide a letter of support from their department chair. Postdoctoral associates, postdoctoral fellows, clinical fellows, and researchers appointed to the position of associate professor or higher are not eligible. Clinicians with faculty appointments who require a mentored research experience should instead apply for the AES Research and Training Fellowship for Clinicians.
- 3. Other support: To qualify as an early career grant applicant, you must meet all of the other eligibility requirements AND be either a new investigator or an at-risk investigator (or both), defined as:
 - a. New investigator (you have received no more than \$100k total in extramural grant direct costs as PI in the last 2 years), and/or,
 - b. At-risk investigator (defined as follows: you have had prior research support as a new investigator AND, unless successful in securing a new grant in the current fiscal year, you will have no funding in the following fiscal year).
 - c. If you have any questions on your eligibility, please email grants@aesnet.org to confirm.
- 4. Have a defined research plan and access to institutional resources to conduct the proposed project.
- 5. Have not previously been awarded an American Epilepsy Society Junior Investigator Award or Research Grant
- 6. Not be listed as the primary mentor on a proposal for a mentored research award by AES. The policy for AES awards is to allow only one proposal to be considered each year from any given laboratory (see Application Policy #2 above).

In addition:

- 7. Physician applicants whose research will involve patient care or direct involvement with patients must have completed all residency training and be licensed to practice medicine at their institution.
- 8. U.S. citizenship is not required; however, all research must be conducted in the U.S.
- 9. Applications are encouraged from women, members of minority groups, and people with disabilities.

EVALUATION CRITERIA

Significance

- Does the proposed project address an important problem or crucial barrier in the epilepsy field, for example as framed by the 2021 NINDS Benchmarks for Epilepsy Research or the Institute of Medicine 2012 research recommendations around public health for epilepsy research?
- If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved?



Applicant

- Does the applicant have appropriate experience and training and potential for further success as an independent researcher?
- Are the collaborators and other researchers well suited to the project?
- Does the applicant hold an academic appointment of Assistant Professor or equivalent? If the applicant has another early faculty appointment (e.g. Instructor, Adjunct, etc.), is there clear indication that they have the support of their institution for an independent research program?

Innovation

- Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions?
- What is the strength of the scientific premise, i.e. the quality and strength of the prior research used as a basis for the proposed research question? Please refer to NIH guidelines for more clarification.

Approach

- Is the research project well-conceived, with clear hypotheses, potential alternative outcomes, and a strong scientific premise, as defined by the NIH guidelines on rigor & transparency?
- Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project?
- Are planned analyses and statistical approach appropriate for the proposed study design and methods?
- Is a plan outlined for data-sharing? This is not a requirement but can sometimes provide added value

Environment

- Are the institutional support, equipment, and other physical resources available to the applicant adequate for the proposed project as an independent primary investigator rather than a mentee in another laboratory?
- Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?

Budget

Reviewers may comment on overlap and budgetary issues.

Optional Supplementary Training Grant

- Does the workshop or conference provide a high-quality research training opportunity for early career epilepsy researchers? Will the opportunity encompass training in research methodology and best practices?
- Is that training targeted to the needs of the specific researcher and their intended career plan?
- Does the meeting offer a unique training opportunity that is not readily available through other more cost-effective sources?
- If the supplementary training award does not fully cover costs of the meeting, including registration, will the remaining costs be covered by other sources of funding?

AWARD POLICIES

Funding Support

Successful applicants receive up to \$75,000 for one year, plus complimentary registration to the Annual Meeting of the American Epilepsy Society. Quarterly payments are made to the institution, and the funds may only be used to support the direct costs of research. Allowable use of grant funds includes: salary for the principal investigator and for scientific personnel directly engaged in the research project; consumable supplies, disposables, and animals necessary to fulfill the project's specific aims; and travel or conference participation



related to the conduct of the research or for the purpose of presenting the results of the research at appropriate scientific or medical meetings. Travel must be conducted during the funding period.

This grant program is intended to seed the launch of long-term research programs funded by other sources. Grant funds MAY NOT be used for: indirect costs or institutional overhead; purchase of permanent equipment that exceeds 10% of the budget; payment of salaries of collaborators at other institutions; or membership dues, subscriptions, books, or journals. Submission of scientific and financial reports upon completion of the project is a requirement of this award.

Support from Other Sources

An applicant may not apply for, use, or accept funds for a research project or part of a project already supported by funds from another public or private source. Accordingly, full disclosure of all available and pending funds for research support must be made in the grant application. If funds from other sources become available during the review or tenure of the Junior Investigator Research Award, the applicant/recipient must inform AES in writing so that a decision can be made about continuation of the award.

Use of Human Subjects/Tissues in Research

When human subjects or tissues are to be used in a research project, it is the responsibility of the grantee to ensure that the project receives approval from his/her Institutional Review Board. A copy of that Board's current approval notice and a copy of the patient informed consent form should be submitted with the application if they are available. If not submitted with an application selected for an award, these documents must be submitted at least two weeks before the start-date. If the research plan has already been approved or exempted by an IRB, because the grantee's proposed workplan is encompassed by an existing research project grant, then this documentation will be sufficient provided that the IRB concludes that the participation of the grantee does not lead to a substantial modification of the research plan.

Use of Animals in Research

When animals and/or animal tissues will be used, it is the responsibility of the grantee to ensure that the project receives approval from the Institutional Animal Care and Use Committee. If available, a copy of these documents should be submitted with the application. If not submitted with an application selected for an award, these documents must be submitted at least two weeks before the award start-date. If the research plan has already been approved or exempted by an IACUC, because the grantee's proposed workplan is encompassed by an existing research project grant, then this documentation will be sufficient provided that the IACUC concludes that the participation of the grantee does not lead to a substantial modification of the research plan.

All entities that receive funding from the American Epilepsy Society must adhere to the following principles:

- 1. Animals shall be used in biomedical research only when no other means of obtaining scientifically sound, valid, and useful results are available.
- 2. The minimum number of appropriate animals required to obtain and validate results shall be used.
- 3. The acquisition, care, and use of animals must be in accordance with all applicable federal, state and local laws and regulations.
- 4. Certifications must be received from research facilities prior to being approved for a research fellowship that the facility(ies), its researchers, and employees adhere to the Animal Welfare Act and the National Research Council Guide for the Care and Use of Laboratory Animals; and any appropriate U.S. Department of Agriculture or National Institutes of Health regulations and standards must be followed.



5. In cases requiring the death of an animal, only the most appropriate and humane form of euthanasia shall be used consistent with the purpose of the research.

APPLICATION INSTRUCTIONS

Full proposals: due by January 16, 2025, at 5:00 PM Eastern Time

Proposals must be submitted through ProposalCentral (https://ProposalCentral.altum.com/).

- Applicants who do not yet have an account with ProposalCentral will need to register as a new user and provide the requested professional profile information before proceeding.
- Once logged in as a user, go to the Grant Opportunities tab, and filter the list to display American Epilepsy Society Awards.
- Locate AES Junior Investigator Award and click on Apply Now to begin an application.

Please read these full instructions carefully and plan in advance to ensure all components will be complete at the time you submit your proposal. Additional instructions will be available on screen in ProposalCentral and within downloadable templates for proposal attachments. No applications, nor any parts of or updates to the application, will be accepted if submitted after the deadline or if sent directly to AES offices by electronic or U.S. mail.

Required components of the proposal include the following sections to be completed as online forms or submitted as individual proposal attachments in PDF format. Additional instructions will be available on screen in ProposalCentral and within downloadable templates for proposal attachments.

Questions?

- For technical difficulties with ProposalCentral, please contact their help desk at pcsupport@altum.com or 1-800-875-2562 (toll-free US & Canada).
- For questions about your application, eligibility, or the review process, contact Michelle Norton at grants@aesnet.org.

1. Title Page:

- a. Enter the title of your proposal (max 75 characters)
- b. Enter the start and end date requested for your project. In general, the award term should be July 1, 2025-June 30, 2026. However, a delay of up to 3 months (beginning no later than October 1, 2025) in the start date is permitted, if necessary.
- c. Categorize your research type, classification, and the type of epilepsy/seizure under investigation. The categories that you select will not influence your eligibility for funding. They will be used to help select appropriate reviewers for your proposal and, in the long-term, for AES to evaluate our review and funding processes. Definitions for most categories are available at the end of these instructions.

Research Type (basic, translational, or clinical). Please select the primary type of research that best fits your proposal. Because multiple categories can apply to a given research proposal, please also estimate what percentage of your proposed work would fit each category.



Research classification. Please select the classification that best fits your proposal. If multiple classifications apply to your research, select a secondary classification.

Type of epilepsy or seizure under investigation. While multiple categories may be relevant to an individual project, please select a maximum of two choices (one primary and one secondary) that best fit your proposal.

- d. **AES Funding Partners.** Indicate if you give AES permission to share your application confidentially with funding partners, including but not limited to those listed on the AES website here. If your research aligns with the priorities of a specific partner organization, you may identify them in the open textbox to ensure that your proposal is flagged for their attention.
- e. **Supplemental Training Award:** Indicate if you intend to apply for the Supplemental Training Award. See below for more information. Your decision to apply proposal for a supplemental training award will have no influence on the consideration of your proposal for a Junior Investigator Research Award.
- **2. Download Templates and Instructions:** All proposal attachment templates and this application guideline document can be downloaded here from ProposalCentral.
- **3. Enable Other Users to Access This Proposal:** This screen allows you to give other users viewing, editing, or administrative access to your grant application, if necessary, such as collaborators or financial officers at your institution. Please inquire internally in your department and your institution's office of sponsored projects (or corresponding office) to understand who should be able to access your proposal.
- **4. Applicant/PI:** Applicant information is pre-loaded 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. This information is pre-loaded 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.
 - a. **ORCID ID (optional):** Please provide your ORCID ID through your Professional Profile (within Personal Data for Applications). If you do not already have an ORCID ID, you may create one through the provided link in the bottom of the Personal Data for Applications file. The ORCID ID is a persistent digital identifier that distinguishes you from other researchers, helping to ensure that your professional activities over time are linked to your identity. Learn more at https://orcid.org/

5. Institution and Contacts:

- a. Institution information is pre-loaded from the applicant's INSTITUTIONAL PROFILE. Double-check that the information is complete and correct. If it is not, click Edit Institutional Profile to update. The institution listed should be the institution where your project will be completed.
- b. Enter the requested contacts in the table provided. Select the appropriate Signing Official and financial officer from the drop-down list or enter the email address of a new official and click on ADD. Complete the information form, and click on the SAVE or CLOSE WINDOW link, and the added official will be listed as the assigned signing official or financial/fiscal officer. Enter the correct contact and address to which award payments should be sent if this proposal is selected for funding.
 - i. Note: The name you enter as the Signing Official will be asked to provide the e-signature for your submission in Step 15 (see below).
- **6. Key Personnel:** Indicate all key personnel other than the applicant/PI who will contribute significantly to the execution of the proposal.



7. Letters of Reference: Use this section to request blind submission of support letters from references familiar with your research and training. Please start this process early to ensure letters are submitted by the application deadline. Two letters of reference are required.

8. Abstracts and Keywords:

- a. Describe the proposed research project for both general (lay) and scientific audiences (1500 characters maximum for each abstract).
- b. Please select keywords that describe the specific focus of your research. At least two keywords are required, and up to five are allowed. Please select keywords carefully, as they will aid in matching your application to appropriate reviewers.
- c. Please select the Benchmarks for Epilepsy Research that best fits your proposed project. If your proposal is selected for funding, your award will be publicly shown in the iCARE database with such categorizations. You must select one, and can select up to two. More information on the Benchmarks is available here.
- **9. Budget Period Detail:** Use this section to provide a detailed budget by listing costs under the headings provided. If you are applying for the optional travel supplement, do not include that request in this budget.
- 10. Budget Summary: This page summarizes the information provided in the Budget Detail.
- **11. Organizational Assurances**: Use this section to indicate use of human subjects, human tissue, or vertebrate animals, and to confirm institutional assurances. All assurances should be provided at the time of the application if available, and documentation must be provided before funding can begin for awarded proposals. See Award Policies above for more information.
- **12. Proposal Attachments** (must be uploaded as PDFs; templates available for download): Attachments must be uploaded as PDFs. Where noted, templates will be available for download on ProposalCentral. Select the appropriate attachment type and upload as instructed onscreen.
 - a. **Applicant biosketch:** Provide using the <u>NIH-style format</u> appropriate to applicant career stage. Biosketches should also be submitted for consultants or collaborators.
 - b. **Research Plan:** Please use the template provided and include the following elements: specific aims, background and significance, previous work directly related to this research (if available), research plan and methods, and data-sharing plan (if any). Refer to p2-3 of these application guidelines to view the evaluation criteria for this section. Use at least 11 pt font and at least ½ inch margins. Maximum 6 pages, not including references.
 - c. **Other Support:** Please use the template provided to select if you qualify as a new investigator and/or as an at-risk investigator, and, to list all other past, current and pending support.
 - i. Please select if you qualify as a new investigator (you have received no more than \$100k total in extramural grant direct costs as PI in the last 2 years), and/or, at-risk investigator (defined as follows: you have had prior research support as a new investigator AND, unless successful in securing a new grant in the current fiscal year, you will have no funding in the following fiscal year).
 - ii. List all other past (last 3 years), current, and pending support for the applicant's research. Other Support includes: all financial resources available in direct support of an individual's research and/or research training, including but not limited to research grants, research



- training fellowship awards, cooperative agreements, contracts, and/or institutional awards. Recognition awards, prizes, or gifts do not need to be included.
- iii. If you selected that you qualify as an at-risk investigator, please submit a brief (200 words) explanation of your barriers to continuous funding in the space provided at the bottom of the template. The 200-word statement will be used by AES staff to evaluate your eligibility.
- d. **Facilities Available:** Provide a profile of the institutional environment and the facilities available. Use at least 11 pt font and at least ½ inch margins. (no page limit).
- e. **Budget Justification:** Provide a justification of your proposed budget by briefly describing each of the cost headings listed in your Budget Summary table. Use at least 11 pt font and at least ½ inch margins. If you are applying for the optional supplementary training grant, do not include that request in this budget. (no page limit)
- f. Other proposal attachments (optional): Examples of additional optional attachments (if applicable) include letters of support from collaborators or consultants, or documentation related to approval for the use of vertebrate animals or human subjects. (See Policies and Procedures; IRB/IACUC documentation will be required prior to funding if selected for an award).
- g. **Supplementary Training Award application (optional):** If you indicated on the Title Page that you would like to apply for the supplementary training award, you may upload a one-page pdf here to request additional support of up to \$4,000 to attend a conference, workshop, or other training opportunity to enhance your research and training experience. Virtual or in-person training experiences will be considered. The PDF that you load should be no more than one page, 11pt font, minimum of ½ inch margins. It should identify the training opportunity or meeting that you would like to attend and explain why it would offer an important opportunity for your career. Include a budget with projected costs for attending the meeting including registration, travel, etc. Explain whether other sources of funding are available, including whether the remaining costs could be covered if the AES award does not full cover the costs of the meeting.
- 13. Demographic Information (optional): All demographic information is voluntary. Applicant information is pre-loaded from the applicant's PROFESSIONAL PROFILE. AES is committed to supporting a strong, diverse, and inclusive research workforce. If you choose to provide information such as gender, race and ethnicity, or disability status, it will be used to help AES understand our granting programs through analysis of deidentified aggregated data. Such demographic information will not be available to the reviewers of your research proposal.
- **14. Validate:** Click the VALIDATE button to check for any missing REQUIRED information or files. All missing required information will be listed on the screen. Please correct any missing information before submitting your application.
- **15. Signature Pages:** The Applicant/PI and the Signing Official must e-sign the application prior to submission in order for the application to pass validation. All signatories must log in to ProposalCentral to sign the application. Signatures needed are:
 - a. Applicant/PI: Please type your full name and hit sign. This will trigger an email to your designated Signing Official asking them to log in and sign.



- b. Signing Official: The Signing Official you listed in Section 5 (Institution and Contacts) will be listed here. After you complete your e-signature, the Signing Official will receive an email asking them to log in and complete their e-signature. They need a ProposalCentral account in order to complete their signature, and can access the application through the "Proposals" tab. The Signing Official's signature is required for you to submit your application.
 - If needed, you can go back to Section 5 and edit the signing official.
- **16. Submit:** You will be unable to submit if you have not provided all the required information. Any missing information will be listed on the screen. If your submission is successful, you will receive a confirmation message on the screen and a confirmation email will be sent to the applicant.

CONTACT INFORMATION

If you encounter technical difficulties with ProposalCentral, please contact their help desk at pcsupport@altum.com or 1-800-875-2562 (toll-free US & Canada).

If questions arise about your application, eligibility, or the review process, contact Jennifer Brummet at grants@aesnet.org.



Category lists and definitions, for fields to be completed on the Title Page.

Research Type	Definitions
Basic	Basic research is the systematic study of the fundamental aspects of phenomena and of observable facts without specific development of processes, products or clinical applications. Projects typically include studies of the mechanisms of normal or disease related processes at the molecular, cellular, systems or organ level.
Translational	Translational research is defined here as research to actively develop and/or refine specific processes, products, clinical applications, and implementation practices that can ultimately be used by patients or healthcare providers.
Clinical	Patient-oriented research, possibly with basic or translational goals, that is conducted with human subjects or on material of human origin (e.g. tissues, specimens and cognitive phenomena) for which an investigator directly interacts with human subjects. Excluded from this definition are in vitro studies that utilize human tissues but cannot be linked to a living individual. Patient-oriented research can encompass physical or behavioral aspects of epilepsy, therapeutic interventions, applications of new technologies, clinical trials, epidemiologic studies, outcomes research, public health, and health services research.

Epilepsy or Seizure Type. This listing has been revised from previous years in response to the 2017 Classification of Seizures Types by ILAE.

- Seizures Focal or localization-related
- Seizures Generalized
- Seizures combined generalized & focal
- Seizures unknown type
- Seizures catamenial
- Seizures early life
- Seizures febrile
- Seizures neonatal
- Seizures Status Epilepticus
- Seizures other
- Seizures in childhood
- Seizures in pregnant women
- Seizures in geriatric populations
- Seizures in other disorders (e.g. Alzheimer's, Autism, alcohol abuse, addiction, renal failure, hepatic encephalopathy, Fragile X)
- Epilepsy Autosomal Dominant Epilepsy w Auditory Features (ADEAF)
- Epilepsy Autosomal-Dominant Nocturnal Frontal Lobe Epilepsy (ADNFLE)

- Epilepsy Childhood Absence Epilepsy (CAE)
- Epilepsy Childhood Epilepsy with Centrotemporal Spikes (formerly BECTS)
- Epilepsy Dravet Syndrome
- Epilepsy Early Myoclonic Encephalopathy (EME)
- Epilepsy Epileptic Encephalopathies
- Epilepsy Genetic Epilepsy with Febrile Seizures plus (GEFS+)
- Epilepsy Hemiconvulsion–Hemiplegia– Epilepsy
- Epilepsy Infantile Spasms (IS)
- Epilepsy Juvenile Absence Epilepsy (JAE)
- Epilepsy Juvenile Myoclonic Epilepsy (JME)
- Epilepsy KCNQ2 Encephalopathy
- Epilepsy Landau-Kleffner syndrome (LKS)
- Epilepsy Lennox-Gastaut Syndrome (LGS)
- Epilepsy Ohtahara Syndrome



- Epilepsy Polyhydramnios, Megalencephaly and Symptomatic Epilepsy Structural Syndrome (PMSE)
- Epilepsy Progressive Myoclonus Epilepsies (PME)
- Epilepsy Reflex Epilepsies
- Epilepsy Self-limited neonatal seizures or familial neonatal epilepsy (formerly BFNE)
- Epilepsy Temporal Lobe Epilepsy (TLE)
- Epilepsy Unknown or other
- Epilepsy West Syndrome
- Etiology celiac disease, epilepsy, and cerebral calcification syndrome
- Etiology Encephalitis
- Etiology genetic
- Etiology –Alpers Syndrome
- Etiology –Angelman Syndrome
- Etiology –Lafora disease
- Etiology -other
- Etiology PCDH19 Epilepsy
- Etiology –SCN8A
- Etiology immune
- Etiology –anti- AMPA receptor antibody
- Etiology –anti- LGI antibody
- Etiology –antibody-mediated
- Etiology –anti-GABA-B receptor antibody
- Etiology –anti-GAD65 antibody
- Etiology –anti-NMDA receptor encephalitis
- Etiology –Rasmussen encephalitis
- Etiology –voltage-gated potassium channel antibody
- Etiology infectious
- Etiology –Bacterial meningitis / meningoencephalitis
- Etiology –Cerebral malaria
- Etiology –cerebral toxoplasmosis
- Etiology –CMV
- Etiology –HIV
- Etiology –Neurocysticercosis
- Etiology –Nodding Syndrome
- Etiology –other/unknown
- Etiology –Tuberculosis
- Etiology metabolic

- Etiology –Biotinidase and holocarboxylase synthase deficiency
- Etiology –central folate deficiency
- Etiology –creatine disorders
- Etiology folinic acid responsive seizures
- Etiology –glucose transporter 1 (GLUT1) deficiency
- Etiology –mitochondrial disorders
- Etiology –peroxisomal disorders
- Etiology –pyridoxine dependent epilepsy/PNPO deficiency
- Etiology –Succinic Semialdehyde Dehydrogenase Deficiency
- Etiology steroid responsive encephalopathy with autoimmune thyroiditis (Hashimoto disease)
- Etiology structural
- Etiology –Hypothalamic Hamartoma with Gelastic Seizures
- Etiology –Malformations of Cortical Development
- Etiology –other/unknown
- Etiology –Sturge-Weber Syndrome
- Etiology –Tuberous Sclerosis Syndrome
- Etiology Post-traumatic epilepsy (PTE)
- Etiology hypoxia-ischemia
- Comorbidity or consequence
- Comorbidity or consequence behavioral, psychosocial, or cognitive co-occurring condition
- Comorbidity or consequence SUDEP
- Epilepsy imitator headache
- Epilepsy imitator movement disorders
- Epilepsy imitator Non-Epileptic Events
- Epilepsy imitator paroxysmal nonepileptic event



Research Classification	Definitions
Etiology	Research included in this category aims to identify the causes or origins of epilepsy and its co-occurring conditions- genetic, infectious, metabolic, environmental, or other factors, and the interactions between these factors
Mechanism of Disease	Research included in this category looks at the biology of how epilepsy/seizures starts and progresses as well as normal biology relevant to these processes. Research may also look at the biology of co-occurring conditions as they relate to epilepsy patients, such as depression, anxiety, autism, Alzheimer's, and traumatic brain injury.
Prevention	Research included in this category looks at identifying interventions which reduce the risk of developing epilepsy or its co-occurring conditions by reducing exposure to risk factors and/or increasing protective factors. Interventions may target lifestyle or behavioral changes and may involve drugs, devices, or vaccines.
Detection/Diagnosis/Prognosis	Research included in this category focuses on identifying and testing biomarkers, technology methods or predictive models that are helpful in detecting and/or diagnosing as well as predicting the outcome or chance of recurrence of seizures and/or co-occurring conditions
Treatment Development or Evaluation	Research included in this category focuses on developing and testing treatments, such as novel therapeutics, devices or other interventions to target seizures and co-occurring conditions.
Outcomes	Research included in this category includes a broad range of areas: surveillance and epidemiology; ethics, education and communication approaches for health care professionals, patients and families, and community members; patient care and health care services research; self-management interventions, effectiveness research and phase 4 trials
Model Systems	Research included in this category looks at the development of new animal models, cell cultures and computer simulations and their application to other studies across the spectrum of epilepsy research
New Technology and Methodology	Research included in this category is primarily focused on developing new technologies and methodologies for use in epilepsy research, clinical care, or self-management.