

POSTDOCTORAL RESEARCH FELLOWSHIP

Application guidelines updated as of July 15, 2024

BACKGROUND AND PURPOSE

Postdoctoral Research Fellowships support postdoctoral trainees conducting basic, translational, or clinical research into the causes, treatment, and consequences of epilepsy, seizures, and related disorders and their treatment under the guidance of a mentor with expertise in epilepsy research.

The fellowship award offers up to \$49,000 for stipend and/or benefits, \$1,000 for travel support to the AES annual meeting, as well as one year of complimentary AES membership and registration for the AES annual meeting. The number of awards granted each year is contingent upon available funds.

SUPPLEMENTARY TRAINING GRANTS

Applicants to the Postdoctoral Research Fellowship 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 Postdoctoral Research Fellowship application 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; others 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 <u>available online</u>.

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. Only one application may be submitted from a given laboratory to the AES early career grant programs. Specifically, an individual may not serve as the primary mentor for more than one application across all mentored award programs. 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. If more than one application is submitted from a single laboratory (as reflected by the primary mentor or investigator) across the early career programs (Predoctoral Research Fellowship, Postdoctoral Research Fellowship, Research & Training Fellowship for Clinicians, Junior Investigator Research Awards, and Epilepsy Study Consortium Mini-Grants), only one of those proposals will be reviewed.



- 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. Be a postdoctoral fellow at an appropriate institution before the start date. Researchers with nonindependent faculty positions such as Instructor, Adjunct Professor, Research Assistant Professor, or nontenure track Assistant Professor may apply if they are working under the supervision of a primary investigator but are strongly encouraged to outline a clear plan for transition to independence. Researchers with appointments at the level of Associate Professor are not eligible, nor are graduate or medical students, medical residents, permanent government employees, or employees of private industry.
- 3. Have a defined research plan and access to institutional resources to conduct the proposed project.
- 4. Have a qualified mentor(s) with expertise to supervise and provide guidance on the specific aspects of epilepsy-related research targeted in the proposal. The mentor must not also be serving as the primary mentor for any other applications for early career grants to AES and must not be submitting a Junior Investigator Research Award (see Application Policy #2 above).
- 5. Have not previously been awarded an AES Postdoctoral Fellowship.

In addition:

- 6. U.S. citizenship is not required; however, all research must be conducted in the U.S.
- 7. Applications are encouraged from women, members of minority groups, and people with disabilities.

EVALUATION CRITERIA

Applicant

- Is the applicant's academic record and research experience of high quality?
- Does the applicant have the potential and commitment to develop as an independent and productive epilepsy researcher?

Mentor

- Is the mentor's research qualifications and available resources appropriate?
- Is there (1) evidence of a match between the research interests of the applicant and the mentor and (2) a demonstrated ability and commitment of the mentor to help the mentee achieve his/her training goals?
- Is there evidence that the mentor will foster a successful research career outcome for this applicant?

Research Plan

- Is the research and training plan feasible for a one-year fellowship? How does that research and training plan fit into an overarching, longer-term research project and career trajectory?
- Does the research plan address a scientifically significant problem in epilepsy research, 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?
- Is the project well-conceived, with clear hypotheses, potential alternative outcomes, and a strong scientific premise? Does it include clear hypotheses and potential alternative outcomes? Does it consider key



biological variables like gender and include authentication of key biological and/or chemical resources, if appropriate, as defined by the <u>NIH guidelines on rigor & transparency</u>?

• 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.

Applicant Statement & Training Plan

- Will the proposed research project and training plan benefit the applicant's career development in terms of scientific knowledge, research, and professional skills?
- By the 3rd year of their postdoc, most fellows are expected to have a plan outlined in the training plan for a transition to independence by their 5th year or earlier. Exceptions to this rough guideline should be justified. Mentors should comment on the proposed transition plan in their letter of support. Similarly, more senior postdocs are expected to have developed the research proposal with more independence than that of more junior postdocs.
- If appropriate based on the existing qualifications of the trainee and their career goals, is there a plan for the applicant to obtain training through courses, seminars, workshops, or national scientific meetings?
- Is there a specific plan for the applicant to attend national scientific meetings or workshops (especially the American Epilepsy Society annual meeting) and/or participate in appropriate networking activities?

Environment

- Are the research facilities, resources, and training opportunities adequate and appropriate, including faculty capable of productive collaboration with the candidate?
- Is the environment for scientific and professional development of the candidate of high quality?

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 \$50,000 over a twelve-month period of the award. This includes up to \$49,000 as stipend plus and \$1,000 for travel support plus complimentary registration to attend the Annual Meeting of the American Epilepsy Society. Fellowship recipients will also receive a complimentary one-year AES membership. Quarterly payments are made to the institution for direct expense of the fellow (salary and benefits) and AES meeting travel costs ONLY. Travel must be conducted during the funding period. No indirect costs are provided. Submission of scientific and financial reports upon completion of the project is a requirement.

Support from Other Sources

Supplementation of the stipend with other grants or by the fellowship institution is permissible, but fellows may not accept other fellowships or similar awards during the AES Fellowship. Exceptions may on occasion be made if the combined total of the awards does not exceed the standard support level for the institution and the fellow



will have protected time to complete the training and research proposed to AES. If similar awards are obtained during the review or tenure of the AES Fellowship, 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 2 weeks before the award 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 2 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 (<u>https://ProposalCentral.altum.com/</u>).

• 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 Postdoctoral Research Fellowship and click on Apply Now to begin an application.

Please read these full instructions carefully. Plan in advance to ensure all components will be completed before the application deadline. 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 <u>pcsupport@altum.com</u> 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). 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. 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.

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 <u>the AES website here</u>. 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: This guidelines document and all proposal attachment templates can be downloaded here.
- **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 your mentor 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. Doublecheck 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 13 (see below).
- 6. Key Personnel: Indicate key personnel other than the applicant/PI who will contribute significantly to the execution of the proposal, including your mentor and/or co-mentor. This may also include collaborators, consultants, postdocs, students, and others.
- 7. Letters of Reference: Use this section to request blind submission of a letter from a reference who is familiar with your research and training. Please start this process early to ensure submission by the application deadline. (One letter of reference is required; an additional letter is optional.) Do not use this section to submit the required letter from your mentor(s) for this application. The letter from the mentor must be submitted as a Proposal Attachment (see below).

8. Abstracts and Keywords:

a. Describe the proposed research project for both general (lay) and scientific audiences (maximum 1500 characters including spaces for each abstract).



- b. 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 <u>here.</u>
- **9. Organization 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.
- **10. Proposal Attachments:** 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 on screen.
 - a. **Applicant and mentor biosketches:** Provide using the <u>NIH-style format</u> that is appropriate to the career stage. If co-mentors are proposed, include a biosketch for each co-mentor. (template available if needed).
 - 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. **Applicant Statement and Training Goals:** Please use the template provided and include the following elements. Use at least 11 pt font and at least ½ inch margins. (maximum 2 pages)
 - i. Describe your long-term career goals and your reason for choosing epilepsy as an area of research training.
 - ii. Describe the research training you will receive during the fellowship term and how this training will contribute to your career goals. This may include both training in the laboratory and didactic training outside of the laboratory such as courses, workshops, and conferences.
 - iii. Describe your plans beyond the proposed fellowship period and how you imagine your training and research in the epilepsy field will continue. As applicable, discuss how the proposed fellowship will facilitate your transition to the next career stage.
 - d. Other Support: Please use the templates provided to list all other past (last 3 years), current, and pending support for the applicant's research and/or research training, and for the primary mentor'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.
 - e. 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, template available)
 - **f. Proposal Development:** Please identify the specific roles of the applicant and the mentor(s) in the development of this fellowship proposal. Use at least 11 pt font and at least ½ inch margins. (no page limit, template available)



- g. Letter of support from the project mentor: The mentor letter should describe the research training plan developed for the applicant, including the skills and techniques the applicant will learn as well as any classes, seminars, professional development activities, and opportunities to participate in conferences and other interactions with the research community. In addition, the letter should describe the applicant's qualifications for this fellowship and how the mentor's expertise and mentorship experience will contribute to his/her future success as a researcher. If one or more comentors are proposed, the letter from the primary mentor should clearly describe their roles in the applicant's training. IMPORTANT: It is the applicant's responsibility to provide these instructions to the mentor(s) for the proposed fellowship.
- h. 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).
- i. 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 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. This award is not intended to support travel to the American Epilepsy Society meeting.
- **11. 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.
- **12. 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.
- **13. 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.

14. 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 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 and the review process, contact Jennifer Brummet at grants@aesnet.org.



CATEGORY LISTS & DEFINITIONS (FOR FIELDS 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 <u>2017</u> <u>Classification of Seizures Types</u> 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.