









APRIL
1-4
2020


How to Submit a Successful AAEF Grant Application

A joint effort by the Research and Scientific Affairs Committee
and the Educational Affairs Committee



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Research Grant Program


Endodontic Educator Fellowship Award

Research Fellowship Award

Educator Grants


Department Grants

Opportunity Grants

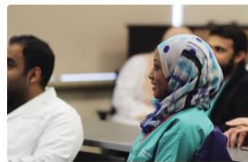


Your Foundation at Work


Visit the areas below to learn more about why the Foundation is essential to the specialty and the future of saving natural teeth.



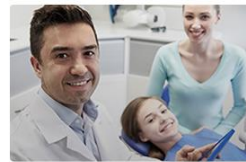
Research



Education



Outreach



Development

PURPOSE

The Foundation inspires and supports research and the genesis of new knowledge in endodontics.

<https://www.aae.org/foundation/>

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FUNDING OPPORTUNITIES

- ▼ [Research Grant Program](#)
 - [Competitive Research Grant Recipients](#)
- ▶ [Endodontic Educator Fellowship Award](#)
- [Research Fellowship Award](#)
- [Educator Grants](#)
- [Department Grants](#)
- [Opportunity Grants](#)

Research Grant Program

The research grant initiative ensures the growth and development of the science of endodontics and improves the quality of patient care. There are two types of research grants: competitive research and resident research grants.

Competitive Research Grants

Research grants are awarded twice a year. Research and Scientific Affairs Committee members present recommendations to the Foundation's Board of Trustees' Annual Meeting for the fall cycle. In each review cycle, research proposals receive an additional review.

Submission

Review the most recent [guidelines and instructions](#)* for submitting a research proposal and plan to apply. All submissions must be made through the submission site.

*Last updated June 1, 2019.

Spring Cycle

The [Spring 2020 submission site](#) is now open. The submission deadline is February 7, 2020, 5 p.m. CST.

Fall Cycle

The Fall 2020 submission deadline is August 15, 2020, 5 p.m., CST.

FOUNDATION FOR
ENDODONTICS 2019-2020
CAMPAIGN

<https://www.aae.org/foundation/>

General Information

- AAE Research Priorities
- Eligibility
- Review Process
- Proposal Preparation and Submission
 - CadmiumCD submission site



General Information



- AAE Research Priorities (attachment A)
 - A. Assessment of Clinical Outcomes
 - B. Assessment of New Methods of Diagnosis, Treatment Modalities and Technology, such as Devices and Materials
 - C. Biology of Pulpal and Periradicular Tissues
 - D. Cracks and Fractures in Teeth
 - E. Demographics/Epidemiology of Pulpal and Periradicular Disease
 - F. Endodontic/Implant Relationships
 - G. External and Internal Resorption
 - H. Educational Research
 - I. Tissue Engineering—Regeneration of the Pulpodentin Complex and Periradicular Tissues
 - J. Trauma

General Information



- Eligibility – all PIs* must be current AAE members
 - 1) Students of an advanced specialty education program in endodontics that is accredited by or has a reciprocal agreement with the Commission on Dental Accreditation (CODA) of the American Dental Association (ADA);
 - 2) Faculty or research scientists in endodontology (or other disciplines) of a dental school that is accredited by or has a reciprocal agreement with CODA;
 - 3) Faculty or research scientists who are not endodontists are strongly encouraged to include an endodontist as consultant or co-investigator. To encourage international scientific collaborations, an international collaborator may be included, however projects must be carried out at institutions that are accredited by or have a reciprocal agreement with CODA.

* PI, principal investigator

General Information

- **Grant Review Process**



- RSAC (Research and Scientific Affairs Committee)
- 12 members, 3-year appointment:
 - Committee Chair, appointed by AAE President-elect, one-year term
 - Members, nominations received, appointed by AAE President-elect, three-year term
 - Complementary expertise – faculty, clinicians, one resident member
- RSAC meets twice/year to discuss applications
- A liaison from both AAE Board of Directors and Foundation Board of Trustees are present in RSAC meetings

General Information

- **Grant Review Process**

- Applications are checked for completeness of critical documentation



Applications lacking critical documentation at the time of submission **WILL NOT** receive scientific review.

General Information

- **Grant Review Process**

- Applications are checked for completeness of critical documentation
- Two independent scientific reviews for each grant



Complete applications are reviewed; critiques are provided.

General Information

- **Grant Review Process**
 - Applications are checked for completeness of critical documentation
 - Two independent scientific reviews for each grant
 - Discussion among RSAC members



General Information

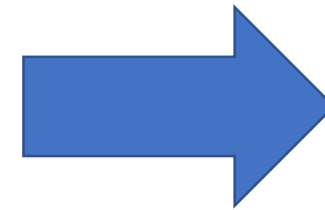
- **Grant Review Process**
 - Applications are checked for completeness of critical documentation
 - Two independent scientific reviews for each grant
 - Discussion among RSAC members
 - Funding recommendations



General Information

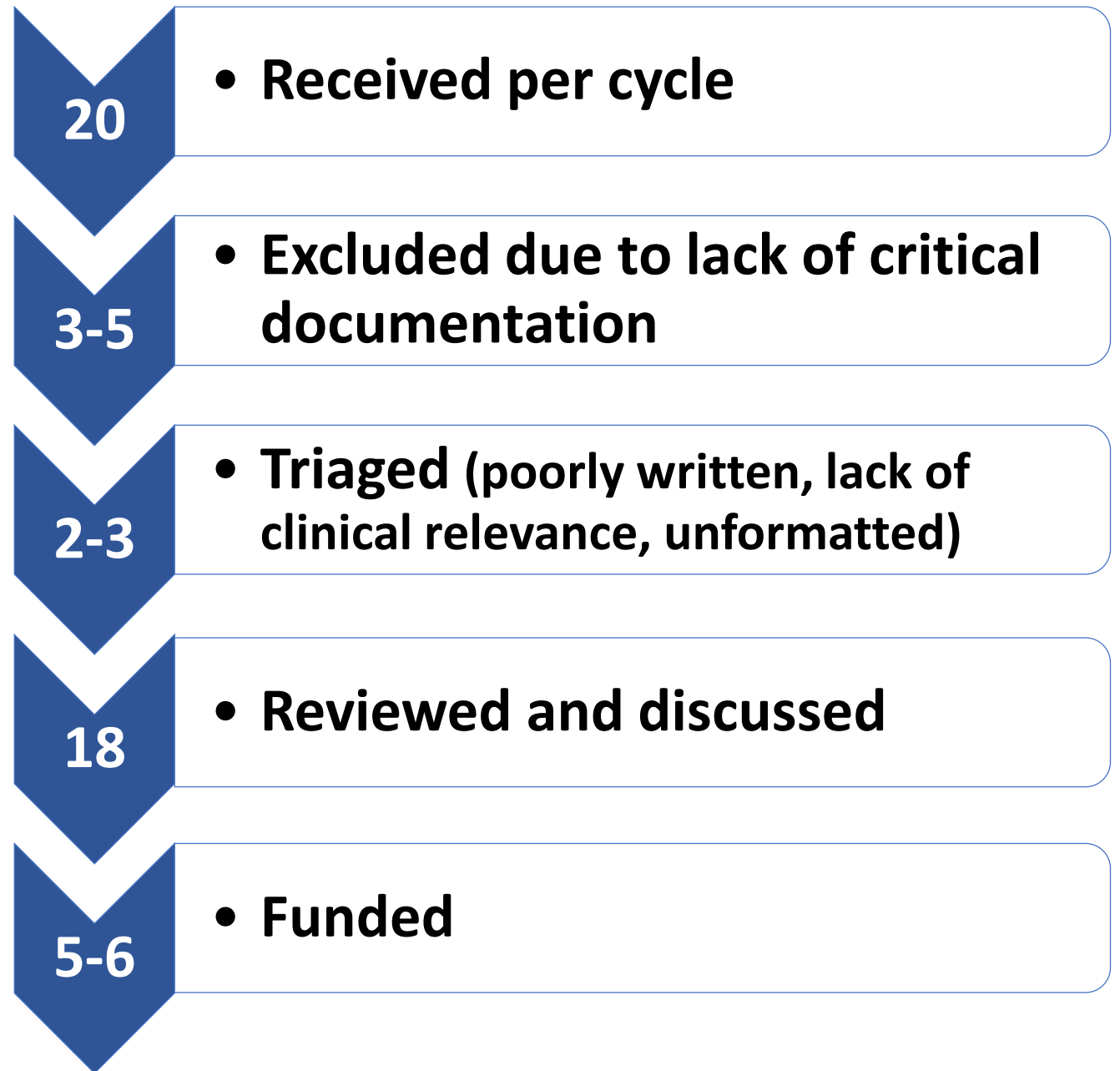
- **Scientific Review Criteria**

- ✓ Literature Review
- ✓ Previous research/knowledge on topic
- ✓ Aims and Hypothesis
- ✓ Research Design
- ✓ Materials and Methods
- ✓ Statistical Analysis
- ✓ Probability of Success
- ✓ Innovation
- ✓ Significance to Endodontics
- ✓ Overall Impact



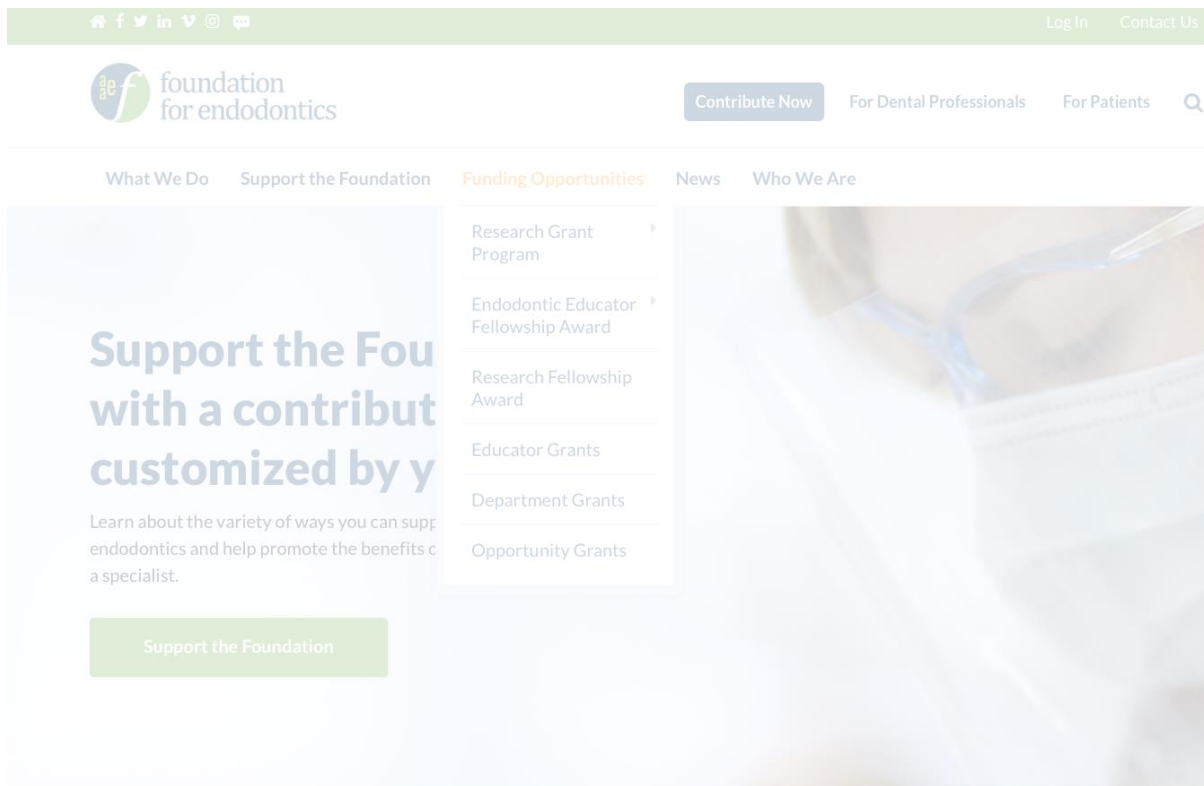
SCORES
1 -10

Grant Submission and Funding Rates



**Based on averages over the past 5 years*

Before you start...



Your Foundation at Work

Visit the areas below to learn more about why the Foundation is essential to the specialty and the future of saving natural teeth.



Research



Education



Outreach



Development

CRITICAL DOCUMENTS!

Templates

While preparing your proposal for submission, use the following templates as instructed in the competitive research grant guidelines.

- [Budget Template](#)
- [Biosketch Template](#)
- [Statistical Approval Template](#)

Follow-Up Completion

Once research grants are complete, based on the timeline agreed upon at the time of funding, investigators are asked to download, complete and submit the [Final Progress Report](#). Once complete, submit the form via email to grants.foundation@aae.org.

Extension

If your research grant project requires more time to complete, please download, complete and submit the [Application for Extension](#). Once complete, submit the form via email to grants.foundation@aae.org for consideration by the Research and Scientific Affairs Committee Chair.

One-Year Progress Report

If your funded project timeline is longer than one year, then a [One-Year Follow-Up Report](#) must be downloaded, completed (at the end of each year of the multi-year project). The form should be submitted via email to grants.foundation@aae.org.

Critical documents


• BUDGET



Reagents
Supplies
Equipment (up to \$1000)
Core services
Animal care costs
Patient compensation
Statistical analysis (\$2000 max)



Salary support
Tuition
Travel
Publication
Unjustified expenses (not in line with research proposed)
Laboratory renovation

American Association of Endodontists Foundation Research Grant Budget Template Form		 foundation for endodontics			
Project Title:					
Principal Investigator:					
Institution:					
Items Requested (itemize by category)	Supplier	Item #	Unit cost	Units requested	Total Cost
Materials and Supplies *					
Chemicals					
Biological agents					
Plastics					
Consumables					
				Subtotal	\$ -
Core services (e.g. microscopy, imaging, sequencing cores)					
				Subtotal	\$ -
Statistical services					
				Subtotal	\$ -
Patient compensation					
				Subtotal	\$ -
Animal care costs					
				Subtotal	\$ -
				Subtotal	\$ -
				Total Cost of Project	\$ -
* Provide a list of all materials needed per category. Insert additional rows per category where needed					

Critical documents

- BIOSKETCH (2 pages)
 - Personal statement – highlight qualifications and role in the proposal
 - Honors and awards
 - Peer-reviewed publications

APPLICANT BIOGRAPHICAL SKETCH
(Two Pages Maximum, use font Calibri 12)

NAME:

POSITION TITLE:

EDUCATION/TRAINING (Most applicants will begin with baccalaureate or other initial professional education. Include postdoctoral training and residency training if applicable.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	START DATE MM/YYYY	END DATE (or expected end date) MM/YYYY	FIELD OF STUDY

A. Personal statement (Describe your qualifications and specific role on the current project)

B. Positions (List in chronological order all employment after dental school, and any military service. Clinicians should include information on internship, residency and specialty board certification (actual and anticipated with dates). State the Position title and include start/end dates, field, name of institution).

POSITION TITLE	START DATE (mm/yy)	ENDING DATE (mm/yy)	FIELD	INSTITUTION

Critical documents

- **STATISTICAL APPROVAL FORM**

- Signed by statistician or faculty in related department
- Faculty involved in the research or in the PI's department *not acceptable*

John Doe, BA, MS
Professor of Biostatistics
University of Scientific Breakthroughs



ATTACHMENT B

RE: Statistical approval

Institution Name and Address:

Dear Committee Members,

I am writing in support of the application,

"_____", with Dr. _____ listed
as principal investigator (PI).

For the purpose of this application, I declare that I:

_____ Have contributed to study design, sample power calculations and proposal of data analysis methods, and will be involved in the statistical analysis of the results

_____ Have not contributed to study design, but approve of the sample size and data analysis methods proposed, and will be involved in the statistical analysis of the results

_____ Have not contributed to study design, but approve of the sample size and data analysis methods proposed, and will not be involved in the statistical analysis of the results

Sincerely,

Name and Credentials

Signature

Date

Critical documents

- **APPROVALS**

- Humans Subjects Research (aka IRB)
- Animal Welfare Committee

Applications that do include appropriate IRB/animal approvals WILL NOT be reviewed!



- **EXEMPT STUDIES**

- Clarifications on the use of human extracted teeth

- **IRB/ANIMAL WELFARE**

- Protocols submitted but not yet approved -- include a copy of email acknowledging IRB's receipt of the proposal

Critical documents

- For RESIDENT grant applications only
 - Two letters of recommendation are required
 - Mentor
 - Program director
 - Collaborator



Conflict of Interest Declaration

- All potential sources of conflict of interest must be disclosed
- Required for all investigators

ATTACHMENT C CONFLICT OF INTEREST DECLARATION

All investigators must disclose any conflict of interest that they might have with respect to any grant application to the Foundation for Endodontics. Having an interest in a product, service, course or company does not necessarily impact an applicant's status. Applicants should exercise particular care that no detriment to the Foundation for Endodontics will result from conflicts between self-interest and those of the Foundation. The overall purpose of Foundation research grants is to advance the specialty and therefore any potential or real conflict of interest (see below) should be disclosed and the project should be independent of any self-interest.

Initial either Declaration A or Declaration B:

Declaration A

In accordance with this policy, I declare that I have NO past, present, or known future financial relationship, consulting position or affiliation, or other personal interest of any nature or kind in any product, service, course and/or company, or in any firm beneficially associated therewith – and that I have not received any gifts of any kind (including intangible remuneration) from any company, individual, or other entity that might benefit from my contribution to the Foundation for Endodontics.

Initials ____ (If you initial here, do not initial Declaration B.)

Declaration B

In accordance with this policy, I declare I have a past or present proprietary or relevant financial relationship or receive gifts in kind (including soft intangible remuneration), consulting position or affiliation or other personal interest of any nature or kind in any product service, course and/or company, or in any firm beneficially associated therewith as indicated below.

Please indicate each relationship, financial interest, corporate, institutional or educational entity and whether it is past or present.

Employee: _____

Grants/Research Support: _____

Consultant: _____

Stock Shareholder (directly purchases): _____

Honorarium/Gift: _____

Financial/Material Support: _____

Initials: _____

NAME(S): _____

SIGNATURE(S): _____

DATE: _____

Applications will not be considered without this document. Please see Attachment B, print and have all research participants sign. This document will then need to be uploaded to the CadmiumCD submission site in the designated Uploads Task.

Writing your (successful) AAEF grant proposal

- **Abstract**
- **Research Proposal**
 - Introduction and Specific Aims
 - Previous Work and Background of the Project
 - Significance of Research in Relation to AAE Research Priorities
 - Experimental Method
 - Data Analysis
 - Resources and Environment
 - Time Schedule for Research
 - References



Writing your (successful) AAEF grant proposal

- **Abstract**
 - 150 word basic summary
 - Statement of the problem being studied
 - Rationale for the study
 - What results of the study might show

Writing your (successful) AAEF grant proposal

- **Research Proposal**

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- References

Checklist (in Cadmium platform)



1. Grant Submitter

Click here to add authors to this submission.



2. Questionnaire

Answer questions regarding your submission.



3. Co-Author/Co-PI List

Click here to add co-authors/co-PI's to this submission.



4. Abstract - Project Description

Complete the requested information about the project.



5. Research Proposal

Complete the requested information about the project



6. Financials

Provide budget justification and itemize specific needs.



7. Research Proposal Uploads

Upload files to support your Research Proposal



8. Biosketch Template



9. Statistical Approval



10. Budget Template



11. Upload

Upload supporting documents

Common questions...



- Is there someone who I contact about the use of the CadmiumCD submission platform?
- Are basic science proposals given priority over clinical studies?
- Are collaborative studies between institutions given priority?
- Do I need preliminary data in order to submit a grant application?
- Is there a limit to the grant budget requested?
- Is there an emphasis on certain research priorities per cycle?
- Can I re-submit my application if it's not approved initially?

Common mistakes...



- **PI not AAE member**
- **Incomplete documentation...**
 - Failure to include Biosketches from all investigators
 - Failure to include statistical support letter
 - IRB/animal welfare approval or evidence of submission not included
 - Budget not detailed enough
 - Budget includes funding for lab equipment not restricted to the research project
- **Unformatted or disorganized proposal, not following guidelines**
- **Lack of clinical relevance to endodontics**

Misconceptions about submitting an AAEF grant proposal

$$\begin{aligned} \frac{dY}{dr} &= \frac{\beta(1-\beta^2)^{-3/2}}{c} = \frac{\beta}{c^2} \left(1 - \frac{v^2}{c^2}\right)^{-3/2} & \frac{d\beta}{dr} &= \frac{d}{dr} \left(\frac{v}{c}\right) = \frac{1}{c} \frac{dv}{dr} \\ & & &= \frac{1}{c} \left(\frac{1}{\beta^2}\right) \left(1 - \frac{v^2}{c^2}\right)^{-3/2} \\ & & &= \frac{1}{\beta^2 c} \left(1 - \frac{v^2}{c^2}\right)^{-3/2} \\ \therefore F &= m_0 \left[Y \frac{dr}{dt} + r \frac{dY}{dr} \right] = m_0 \left[Y \frac{dr}{dt} + r \frac{1}{\beta^2 c} \left(1 - \frac{v^2}{c^2}\right)^{-3/2} \cdot \alpha \right] = m_0 \left[Y \alpha + \frac{r}{c^2} \left(1 - \frac{v^2}{c^2}\right)^{-3/2} \cdot \alpha \right] \\ &= m_0 \alpha \left[\frac{1}{\left(1 - \frac{v^2}{c^2}\right)^{3/2}} + \frac{r}{c^2} \left(1 - \frac{v^2}{c^2}\right)^{-3/2} \right] \\ \therefore F &= m_0 \alpha \left[\frac{1}{\left(1 - \frac{v^2}{c^2}\right)^{3/2}} \right], \quad W = \int F dx = \int \frac{m_0 \alpha}{\left(1 - \frac{v^2}{c^2}\right)^{3/2}} dx = m_0 \int \frac{1}{\left(1 - \frac{v^2}{c^2}\right)^{3/2}} \cdot \frac{dr}{dt} dx = m_0 \int \frac{v}{\left(1 - \frac{v^2}{c^2}\right)^{3/2}} dv \\ u &= 1 - \frac{v^2}{c^2} \Rightarrow W = m_0 \left[\frac{c^2}{-2} \frac{du}{u^{3/2}} \right] = m_0 \left[\frac{-c^2}{2} \left[\frac{-u^{-1/2}}{-1/2} \right] \right] = m_0 \left[\frac{c^2}{u^{1/2}} \right] = m_0 \left[\frac{c^2}{\left(1 - \frac{v^2}{c^2}\right)^{1/2}} \right] + C \\ W=0 &\Rightarrow r=0 \Rightarrow C = -m_0 c^2, \quad W = \frac{m_0 c^2}{\left(1 - \frac{v^2}{c^2}\right)^{1/2}} - m_0 c^2 \Rightarrow W + m_0 c^2 = \frac{m_0 c^2}{\left(1 - \frac{v^2}{c^2}\right)^{1/2}} \end{aligned}$$



Final remarks

- Start early and do not be intimidated by the process
- Consider clinical applications/relevance of the research project
- Consider timelines to obtain statistical and IRB/Animal research approvals in advance
- Ensure project rationale and methods are appropriate
- Include preliminary data relevant to the project if applicable
- Make sure budget is detailed and justified
- Double check that all required documentation is included

The AAEF wishes to fund your grant applications!

Acknowledgments

- Research and Scientific Affairs Committee Members
- Educational Affairs Committee Members
- AAE Staff

Questions?



grants.foundation@aae.org