AWARD GUIDELINES

The Frontiers in Anesthesia Research Award (FARA) is awarded triennially and is the largest IARS research grant. The FARA fosters innovation and creativity by an individual investigator, funding projects with significant originality and scientific excellence. Projects must have direct relevance to anesthesiology and play a critical role in the scientific evolution of a novel concept. Applicants must demonstrate commitment to research and the potential for leadership.

Interested applicants may apply by submitting an online application (instructions included).
Applications for this award must be submitted by January 31, 2021.

Applicant Eligibility Criteria
- Principal applicant must be an IARS member.
- Nominating letter from Department Chair must document that the candidate will have a minimum of 65% research time (does not have to be exclusively for proposed project).
- An accompanying letter from the appropriate individual of the institution responsible for grant-in-aids (i.e. Vice President of Research, Director of Research Administration, or Assistant Dean of Research) is required.
- Candidates must be pursuing independent research careers in anesthesiology.
- Appropriate collaboration is encouraged. Collaboration with (an)other department(s) requires a letter of intent from the co-investigator.
- Proposed research involving human or animal subjects must adhere to appropriate state and federal guidelines. Nominees must document compliance with institutional requirements.

Applicable Areas of Research
- Proposed studies must address one of the following areas of research:
- Fundamental Neuroscience Unknowns
- Immune, Inflammatory and Metabolic Consequences of Trauma, Surgery and Critical Care
- Best Use of Systems-Based Practice to Enhance Patient Safety & Quality
- For specific examples of the aforementioned research areas, see our Key Research Questions www.iars.org/awards/keyresearchquestions

Research Project Guidelines
- Projects should be completed within three years after the award of the grant.
- Amount requested must not exceed $750,000 payable over three years.
- Funds should be used only for research support and direct costs. Budget should not be used solely for salary support.
- Proposed research involving human or animal subjects must adhere to appropriate state and federal guidelines. Nominees must document compliance with institutional requirements.
- All applicants must complete the official grant application no later than 11:59pm EST on January 31, 2021. All requested information must be supplied. Failure to do so will disqualify the application.

Application Process
- The official online application on proposalCENTRAL must be used.
- All information requested in the application and attachments must be supplied. Failure to do so will disqualify the application.

Disclosure
- All current and pending extra-mural funding of all applicants must be disclosed in the Other Support document.
- Project titles and any overlap to the proposed project must be listed.
- Should funding status change (current and pending) during the application cycle it is the responsibility of the applicant to immediately notify the IARS.
- Any change in the status of the principal applicant, including funding, subsequent to the submission of the application must be conveyed in writing to the IARS, and may require review and reconsideration by the External Advisory Board.

Application Review and Recipient Selection
- All applications will be reviewed by an External Advisory Board, appointed by the IARS Board of Trustees and Research Committee. Awards are granted at the sole discretion of the IARS.
- Selection criteria include originality, scientific excellence and the candidate's potential for leadership in the field.
- Proposed areas of study must have direct relevance to new and future directions of the anesthesiology specialty.
- IARS provides grant opportunities without regard to race, color, religion, sex, national origin, age, or disability.
- One project will be selected to receive a maximum of $750,000, payable over three years.
- The winner will be announced in May 2021.

Scientific Misconduct
- Scientific misconduct is defined by public health service (PHS) as fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting, or reporting research.
- Each applicant's institution must confirm that administrative policies are established and followed for dealing with and reporting possible scientific misconduct.

Award Details
- The maximum award amount for the selected project is $750,000, payable over three years.
- Institutional indirect expenses will not be funded.
- Award funds will be allocated in three equal installments of $250,000 paid in July 2021, July 2022, and July 2023. Consideration will be given to requests for unequal payment installments.
  - The second and the third (final) installments are contingent upon receipt of a satisfactory progress report submitted to IARS by June 1, 2022 and June 1, 2023.
- A final progress report must be submitted to IARS on or before December 1, 2024.
- Any and all publications resulting from research that has utilized IARS funds must indicate the following: "Supported (or 'Supported in part') by a grant from the International Anesthesia Research Society."

APPLICATION INSTRUCTIONS

Applicants must be IARS members and must submit an online application using
the proposalCENTRAL website (https://proposalcentral.com).

Deadline to submit an application is 11:59 PM EST on January 31, 2021.

Getting started in proposalCENTRAL
- *If you are a new user of proposalCENTRAL,* click the orange "Create One Now!" button to complete the registration process. After you register, it is recommended that you complete your Professional Profile (second tab from the left) before starting an application.
- *If you are already registered with proposalCENTRAL,* login with your username and password.
- To start an application, select the "Grant Opportunities" tab (tab furthest to the right). A list of applications will be displayed. Find the Grant Maker "International Anesthesia Research Society" and "IARS Frontiers in Anesthesia Research Award." Click the "Apply Now" link to create an application.

If you have difficulties registering, logging in, or creating your application, contact proposalCENTRAL Customer Support:
Toll-free U.S. and Canada (1-800) 875-2562
Direct Dial International (703) 964-5840
Email: pcsupport@altum.com

Application Format

The following information is required to submit a complete application. Numbers correspond to the application sections that appear on the left side of the online application.

1. **Title Page**. Enter the title of the research project. The title is limited to 75 characters in length (including spaces). Enter total amount requested in U.S. dollars.

2. **Download Templates & Instructions**. The Program Guidelines and Application Instructions document and all required templates to be completed and submitted with the application can be downloaded from this section. Click the "Download" button to save each of the templates to your computer. Complete each template and convert completed templates to PDF format. You will upload these completed templates in PDF format, along with additional required attachments, in Section 12 of the application. Please see below in Section 12 for more instructions on how to complete and upload templates and attachments.

3. **Enable Other Users to Access this Proposal**. Optional. This section allows you to give other users access to your grant application, with varying levels of permissions.

4. **Applicant/PI.** Enter information for the applicant.
   - Indicate that the applicant is an active IARS member.
   - Indicate if the applicant is a resident in training.
   - Indicate that the applicant has a minimum of 65% protected non-clinical time.

5. **Institution & Contacts**. Enter information regarding the lead institution, Signing Official, Financial Officer, and Department Chair for the proposed project.

6. **Collaborators**. Enter information regarding any co-investigators on the project. Additionally, please provide the names of significant contributors to the proposed research project. For example, list your external advisors, advisory committee members, consultants and co-authors of publications (last 3 years).

7. *Letters of Reference*. All applications must include three (3) letters of recommendation. Letters of recommendation should be written by individuals who can speak to the significance and impact of the applicant's project. Letters of recommendation are to be completed and signed by the referees and *uploaded to the applicant's application in proposalCENTRAL by the referee.*
   - Steps for the applicant to contact the referee to submit a letter of recommendation:
     i. Enter the email address of the referee who will be submitting a letter of recommendation in the text box provided and click the "+."
     ii. In the small window that opens, enter the last name and first name of the referee. If the referee is already registered on proposalCENTRAL, their name will be displayed.
     iii. Click the "SEND EMAIL" button and close the window. An email will be sent to the referee from proposalCENTRAL requesting a letter of recommendation. The email will include instructions and a link for the referee to upload their letter directly to the application.
     iv. Once the email has been sent, referee information is displayed in the table. The status of letter submission can be viewed here. When each of the letters is uploaded, the status will display as "SUBMITTED."

8. **Project Summary.** Enter a brief description of the proposed project, including the aim and relevance to anesthesiology, directly into the space provided. Please note that your answer is limited to 2,000 characters (including spaces) and any additional characters beyond the limit will be truncated. To ensure that you comply with the character limits, it is advised to draft your answers in Microsoft Word or similar program before entering them into proposalCENTRAL.

9. **Budget Period Detail.** Enter direct research expenses per budget period (Budget Periods 1, 2, and 3 are separated in different windows). Complete Year 1 expenses first, then Year 2, then Year 3. NOTE: Award funds may NOT be used for indirect costs or institutional overhead. These are not allowable expenses.

10. **Budget Summary**. A summary of the proposed budget appears here (fields are auto-populated per the data entered in Section 8). If applicable, provide a detailed budget justification in the space provided (explain and justify major equipment purchases, unusual supply requests, and patient care costs). Enter "N/A" if not applicable. Please note that your answer is limited to 3,000 characters (including spaces) and any additional characters beyond the limit will be truncated. To ensure that you comply with the character limits, it is advised to draft your answers in Microsoft Word or similar program before entering them into proposalCENTRAL.

11. **Organization Assurances**. Indicate if the proposed project involves Human Subjects and/or Vertebrate Animals. If your study involves Human Subjects, please complete the Protections for Human Subjects checklist and indicate the status of IRB approval and the date of approval (if approval is pending, enter date the request was submitted). If your study involves Vertebrate Animals, please complete and upload the Vertebrate Animals Section checklist and indicate the status of IACUC approval and the date of approval (if approval is pending, enter date the request was submitted). The assurances/certifications are made and verified by the signature of the institutional official signing the "Certification and Acceptance of Terms" form. If a grant is awarded, documentation of IRB and/or IACUC approval (if applicable) must be submitted upon request. NOTE: submitting the FARA application with pending IRB and/or IACUC approval is acceptable, however, approval must be obtained prior to award funds being allocated (July 2021).

12. **Attachments**. Prepare and upload the following documents into your application in portable document format (PDF). Use templates where provided.
    - Required documents:
      1) *NIH Biosketch – Applicant/Principal Investigator*
         - Upload this document as a PDF. Not to exceed 5 pages.
      2) *Letter of Nomination – from Department Head*
         - A letter of nomination written by the Department Chair is required. The Chair must document that the candidate will have 65% research time (does not have to be exclusively for proposed project).
         - The letter should be composed on institution or department letterhead, signed, and given to the applicant to be uploaded to the application in PDF format.
      3) *Letter of Recommendation – from Grant-in-Aids*
         - Letter from individual at institution responsible for grant-in-aids (i.e. VP of Research, Director of Research Administration, or Assistant Dean of Research
      4) *Letter of Recommendation – from Individuals (3 total)*
         - Letters of recommendation should be written by individuals who can speak to the significance and impact of the applicant's proposed project.
      5) *Proposal Narrative (template)*
         - Download the template, complete, save as PDF, and upload.
         - Follow detailed instructions below. Proposal Narrative is limited to 13 pages, including figures and tables, excluding references.
      6) *Data and Safety Monitoring Plan – include only for clinical trials (template)*
         - Download the template, complete, save as PDF, and upload.
         - Provide a general description of a monitoring plan that you intend to establish as the overall framework for data and safety monitoring for your clinical trial.
      7) *Applicant Activities During Award Period (template)*
         - Download the template, complete, save as PDF, and upload.
         - For each award year, indicate the applicant's percent effort/committed time dedicated to each area. (Note: Applicants must have a minimum of 65% protected non-clinical time to be eligible for this award.)
      8) *Other Support (template)*
         - Download the template, complete, save as PDF, and upload.
         - Per the instructions, provide active, applied for, and pending support for the principal applicant and any co-investigators.
      9) *Facilities (template)*
         - Download the template, complete, save as PDF, and upload.
         - Provide a description of the research facilities, resources, and equipment that are available to the applicant and that will allow successful implementation of the proposed research program.
      10) *Certification and Acceptance of Terms (template)*

- Download the template, complete, save as PDF, and upload.
- This document requires three signatures (Applicant, Department Head, Dean/Designated Institutional Official).

Optional documents:

- *NIH Biosketch – Co-Investigator* (Upload as PDF. Not to exceed 4 pages per co-investigator.)
- *Human Subjects Checklist*
- *Vertebrate Animals Checklist*

13. **Validate.** Validate the application on proposalCENTRAL. This is an essential step and checks for required data and attachments. You will not be able to submit your application if all the required information has not been provided. An application that has not been validated cannot be submitted.

14. **Application Preview.** After successfully passing the validate check, you may click "Print Signature Pages and Attached PDF Files" to preview your application. NOTE: The Signature Pages are NOT required. You do not need to do anything with these pages. Required signatures are obtained on the Certification and Acceptance of Terms document.

15. **Submit.** Once you have clicked the "Submit" button, an email will be sent to you confirming your submission.

Proposal Narrative Content and Guidelines
This section is adapted from the U.S. Department of Health and Human Services Public Health Service Grant Application Instructions (PHS 398).

Begin each section of the Proposal Narrative with a section header (e.g., Introduction, Specific Aims, Research Strategy, etc.).

- **Introduction and Specific Aims** (Limit: 1 page)
  o State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved.
  o List succinctly the specific objectives of the research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology.
- **Research Strategy** (Limit: 12 pages)
  o *Significance*
    ▪ Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.
    ▪ Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.
    ▪ Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.
  o *Innovation*
    ▪ Explain how the application challenges and seeks to shift current research or clinical practice paradigms.
    ▪ Describe any novel theoretical concepts, approaches or methodologies, instrumentation or intervention(s) to be developed or used, and any advantage over existing methodologies, instrumentation or intervention(s).
    ▪ Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation or interventions.
  o *Approach*
    ▪ Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Indicate how the data will be collected, analyzed, and interpreted as well as any resource sharing plans as appropriate.
    ▪ Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.

- If the project is in the early stages of development, describe any strategy to establish feasibility, and address the management of any high-risk aspects of the proposed work.
- May include preliminary studies.
  - Discuss the PI's preliminary studies, data, and/or experience pertinent to this application.
- **Bibliography and References Cited** (No page limit)
  o Provide a bibliography of any references cited in the Proposal Narrative.
  o Each reference must include names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication.
  o Follow scholarly practices in providing citations for source materials relied upon in preparing any section of the application.
  o References should be limited to relevant and current literature that is pertinent to the proposed research.

Formatting Guidelines for Attachments
- **Font**: Use an Arial, Helvetica, Palatino Linotype or Georgia typeface, a black font color, and a font size of 11 point or larger.
- **Margins**: Page margins should be no less than 0.5 inch on each side for all pages. Template margins may be altered within these specifications
- **Spacing**: Single-spaced text is acceptable. Space between paragraphs is recommended.
- **Page numbering:** The Proposal Narrative must be numbered consecutively. Do not use suffixes (e.g., 5a, 5b)
- **Figures, Graphs, Diagrams, Charts, Tables, Figures Legends, and Footnotes:** Text must be readily legible. Font size of 9 point of larger is recommended.
- **Grantsmanship:** Use English and avoid jargon. If terms are not universally known, spell out the term the first time it is used and note the appropriate abbreviation in parenthesis; the abbreviation may be used thereafter.

Inquiries
Inquiries or technical issues regarding proposalCENTRAL and the online application process should be directed to customer support at (703) 964-5840, or toll free at (800) 875-2562, or by email at pcsupport@altum.com.

Inquiries about the program guidelines, eligibility requirements, and application materials can be directed to IARS. Please contact Awards and Grants Program Director Tricia Brazil at (415) 296-6905, email tbrazil@iars.org