

# AMERICAN ORTHOPAEDIC SOCIETY FOR SPORTS MEDICINE STEVEN P. ARNOCKY YOUNG INVESTIGATOR GRANT REQUEST FOR APPLICATIONS & GRANT GUIDELINES

## REQUEST FOR APPLICATIONS

The **American Orthopaedic Society for Sports Medicine (AOSSM)**, under the auspices of its Research Committee, is offering one grant of up to \$40,000 to support an orthopaedic sports medicine clinical research project for early career Principal Investigators OR one grant of up to \$40,000 to support an orthopaedic sports medicine basic science research project for early career Principal Investigators.

**OBJECTIVE:** This research grant opportunity aims to train early career surgeons, undertaking orthopaedic sports medicine research, as principal investigators with the assistance of an experienced supervisor and/or investigative team. The opportunity is not intended to assist experienced investigators complete an in-progress project. Ideally, the Young Investigator will perform the primary role in generating the hypothesis, designing the experiment, carrying out the experiment, and interpreting the results. The greater the role of the early career Principal Investigator in all areas of the project, the more favorably the grant will be considered.

Pre-Review of the Young Investigator Grant application is **REQUIRED** for consideration of this grant opportunity. Members of the AOSSM Research Committee will provide written feedback to the investigative team with emphasis on the Specific Aims and Research Strategy of the proposed project. Applicants can modify the project proposal in response to feedback, collect additional or new data (if necessary), and provide responses to feedback in the final application.

### RESEARCH PRIORITIES:

- Topics related to areas of study indicated on the [AOSSM Research Agenda](#) may receive favorable consideration for funding and any orthopaedic sports medicine research topic is eligible for consideration.
- Empirical research projects in the fields of basic science, translational, or clinical study are eligible.

### FUNDING:

This program provides a one-time, non-renewable, award of up to \$40,000 to be disbursed over a 24-month period. The start date of the funded project cannot be earlier than August 1, 2021 and should be completed in a 24-month period. No-cost extensions may be requested.

### ELIGIBILITY:

- For the purposes of this grant opportunity, a Young Investigator is defined as:
  - An orthopaedic surgeon who has graduated from an approved residency program or is a resident currently in an approved program.
  - A Principal Investigator that has received less than \$25,000 in funding from organizations external to their parent institution. The Principal Investigator may not be considered a Young Investigator if there is a significant history of presentations, publications, or experiments which have been carried out through either self-funding or funding through the parent institution.
  - The Principal Investigator must document and perform the primary role in the proposed project.
  - The Principal Investigator must remain associated with the parent institution for the duration of the project period.
- Any investigative team seeking such a grant must include at least one member of AOSSM in good standing.
- No AOSSM Board officer (e.g., President, Vice President, Treasurer, Secretary, etc.) may be a named investigator on any application.

**PRE-REVIEW APPLICATION DEADLINE:** FEBRUARY 28, 2021 at 11:59pm PST

**FINAL APPLICATION DEADLINE:** JUNE 1, 2021 AT 11:59PM PST

## **STEVEN P. ARNOCKY YOUNG INVESTIGATOR GRANT** **GRANT GUIDELINES**

### **1) APPLICATION REQUIREMENTS**

The grant application must be completed in full and submitted together with the components requested in these grant guidelines. Any application not completed in full will not be considered. Applications must be submitted at the following website:

### **[AOSSM RESEARCH GRANT SUBMISSION CENTER](#)**

The following documents must be uploaded to the Submission Center:

- Specific Aims
- Research Strategy
- References
- Budget
- Benchmarks and Timeline
- Investigator Biosketches

The preferred document types for the Submission Center are .doc, .docx, .pdf, .xls, .xlsx

### **2) DEADLINES**

You must complete your **PRE-REVIEW** submission no later than ***FEBRUARY 28, 2021 at 11:59pm PST*** for consideration of this grant opportunity. The Submission Center allows applicants to save in progress applications.

### **3) APPLICATION PROCEDURES**

- Applicants must sign in to the Submission Center using AOSSM account credentials.
- Non-Member applicants and administrative/research assistants completing an application for an investigative team or AOSSM Member can use an existing account or create their own AOSSM account.
- Applicants can utilize the Account Finder utility on the AOSSM Sign In page as well as the Forgot Username or Forgot Password utilities.
- Please contact Kevin M. Boyer, AOSSM Director of Research at [kevin@aossm.org](mailto:kevin@aossm.org) or 847.655.8628 if you need assistance with signing in or questions about using the Submission Center.

*Using the AOSSM Research Grant Submission Center*

Signing in for the first time:

scroll to the bottom of the page and click “Begin the Grant Application Process” button.

Returning users:

access applications using the “My Applications” button at the top, left of the page -or- by clicking the “Begin the Grant Application Process” button at the bottom of the page.

My Applications Dashboard: The dashboard will appear after you have saved an application in progress.

### Step 1: Application

Complete all required fields in the Grant Submission Form, where possible complete unrequired fields (helpful hints are available by clicking the “?” in applicable fields). **Click the “Save and Return” button at the top of the page to save an application in progress.**

Complete and upload the required documents, as described in the Application Components of these guidelines. These documents are required items and you will not be able to submit the application for review until they are uploaded.

Applicants can navigate the different steps of the submission process using the numbered buttons at the top of the screen. (for example: adding the Principal Investigator or Authorized Representative in Step 2 before uploading the required documents)

You can continue to Step 2: Add People of the application process by clicking “Continue” at the bottom of the page.

### Step 2: Add People

All applications must designate the Principal Investigator, an Authorized Representative, and a Contact Person. The information of the person whose credentials were used to sign in to the Submission Center using an AOSSM login, will appear on this screen in the role of Contact Person. Click “Add Person” to designate required roles.

One person can have the role of Principal Investigator and Contact Person.  
One person can have the role of Authorized Representative and Contact Person.  
One person cannot have the role of Principal Investigator and Authorized Representative.

The Principal Investigator is the individual designated by the application to have the responsibility to direct the project supported by the grant. For the Young Investigator Grant, the Principal Investigator is the individual meeting the eligibility requirements listed in the Request for Applications above. Co-Principal Investigators are permitted for the Young Investigator Grant and must meet the eligibility requirements as well.

The Authorized Representative is the individual designated by the parent institution and authorized to act for the organization and to assume the obligations imposed by the laws, regulations, requirements, and conditions that apply to grant applications or grant awards.

You can continue to Step 3: Review the proof of the application process by clicking “Continue” at the bottom of the page.

### Step 3: Review the proof

On this page you can review your entries from the Application form and uploaded documents. Click “Edit” to return to the Application form and make changes to any fields or uploaded documents -or- click “Continue” to save your application and proceed to Step 4: Thank you.

If a required field or role/person is not complete you will receive a notification indicating the missing information. Applicants can immediately rectify this missing information by clicking the button labelled "Click here to complete the required fields" -or- save the application by selecting "DO NOT SUBMIT yet, return to home page" to return to the My Applications Dashboard

Step 4: Thank you

On this page you can finalize your application by selecting "SUBMIT NOW for review" -or- save the application for finalization at another time by selecting "DO NOT SUBMIT yet, return to home page" to return to the My Applications Dashboard.

**By selecting "SUBMIT NOW for review" you are completing your application and submitting to AOSSM for review.** You will receive a confirmation email verifying the receipt of your application.

#### 4) APPLICATION COMPONENTS

##### SPECIFIC AIMS:

**Specific Aims are limited to one page.** This is the most important page of the application.

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 have on the research field(s) involved. 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:

**The Research Strategy has a limit of five pages.**

The Research Strategy should include sufficient information needed for evaluation of the project, independent of any other document. Be specific and informative and avoid redundancies.

The Research Strategy should answer these broad questions:

- What has already been done?
- What do you intend to do?
- Why is the work important?
- How are you going to do the work?

Organize the Research Strategy in the order specified below and using the instructions provided below. Start each section with the appropriate section heading – **Significance, Innovation, Approach**. Cite published experimental details in the Research Strategy and provide the full reference in the References document.

If an applicant has multiple specific aims; Significance, Innovation, and Approach may be addressed either for each Specific Aim individually or for all of the Specific Aims collectively

##### **Significance**

- Explain the importance of the problem or critical barrier to progress that the proposed project addresses.
- Describe the strengths and weaknesses in the rigor of the prior research (both published and unpublished) that serves as the key support for the proposed project.
- 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.

##### **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 interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions.
- Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.

### **Approach**

- Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project.
- Describe plans to address weaknesses in the rigor of the prior research that serves as the key support for the proposed project.
- Describe the experimental design and methods proposed and how they will achieve robust and unbiased results.
- Include how the data will be collected, analyzed, and interpreted as well as any resource sharing plans as appropriate.
- Include sample size calculations and/or power analysis.
- 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.
- Point out any procedures, situations, or materials that may be hazardous to personnel and precautions to be exercised.

### **REFERENCES:**

List all references according to [The American Journal of Sports Medicine format](#) and alphabetically. Each reference must include the title, names of all authors, book or journal, volume number, page numbers, and year of publication. The reference should be limited to relevant and current literature. While there is not a page limitation, it is important to be concise and to select only those literature references pertinent to the proposed research.

### **BUDGET:**

Applicants are free to present their **proposed budget in any format**. Please list each major expense separately with a brief description and total amount. Supplies under \$1000 do not need to be itemized. Budget justifications are encouraged but not required. See Section 5 of these guidelines for fiscal procedures and policies.

### **BENCHMARKS AND TIMELINE:**

Applicants are free to present their **proposed benchmarks and project timeline in any format**. Include major tasks you will accomplish during the project period and milestones events that will occur to demonstrate progress towards the Specific Aims and completion of the project.

### **APPENDIX:**

Applications may include the following optional materials in the appendix:

- Surveys, questionnaires, data collection instruments, and clinical protocols.
- Cover letter
- Letters of support

#### INVESTIGATOR BIOSKETCHES:

**The Submission Center will accept up to 5 biosketches of the investigative team. The biosketch of the Principal Investigator is required.** Biosketches of senior investigative team members are strongly encouraged.

**The biosketch for each investigator is limited to three pages.**

A blank biosketch form is available on the AOSSM website in our [Research Forms Library](#). Applicants can complete this form using the instructions below. If any member of the investigative team already has a previously completed NIH Biographical Sketch (or other funding agency biosketch) you may submit the form without page limitation.

#### Name/Position Title/Education/Training:

Complete the block at the top of the biosketch page.

#### Positions and Honors:

List in chronological order previous positions and list in chronological order any honors. Include present membership or committee appointments.

#### Selected Peer-reviewed Publications:

AOSSM encourages applicants to limit the list of selected peer-reviewed publications or manuscripts in press to no more than 15. The individual may choose to include selected publications based on significance of contribution to science, recency, importance to the field, and/or relevance to the proposed research.

#### Ongoing and Completed Research Support:

List ongoing and completed research projects from the past three years that you want to draw attention to. Briefly indicate the overall goals of the projects and your responsibilities. Do not include the number of person months or direct costs.

### **5) FISCAL PROCEDURES AND POLICIES**

#### Facilities to be provided by the grantee(s) or their parent institutions:

Research grants are designed to serve as supplementary funding for meritorious projects initiated or contemplated by the grantee(s) and their parent institutions. Therefore, the grantee(s) and such institutions are expected to provide all the necessary basic facilities and services normally expected in professional environments qualified to undertake research related to sports medicine. **AOSSM expects that the grantee(s) will have available, whether from their own resources, funds other than those assigned by AOSSM, or from their parent institutions the following, unless otherwise specifically agreed upon:**

1. Laboratory space;
2. Maintenance services, including maintenance supplies and service contracts;
3. Telephone service, if needed;
4. Library services, including subscriptions to periodicals and the purchase of books;
5. Laboratory furniture;
6. Salaries of principal investigator or co-investigators, unless otherwise agreed upon;
7. Foreign and local travel expenses of personnel working under the AOSSM grant;
8. Society dues and memberships of personnel working under the AOSSM grant;

9. Workers' compensation, public liability or other hazard and special insurance;
10. Office equipment;
11. Employee group life, disability, medical expense or hospitalization insurance;
12. Audio/visual project support devices and items; and
13. Hospital bed expense, nursing or related services, even when used for research studies pertinent to the subject of the AOSSM research grant.

As a matter of policy, AOSSM grant funds may not be spent for remodeling or building construction costs or travel expense.

Overhead/Indirect Costs:

**AOSSM funds under the grant may not be used to pay institutional overhead/indirect (facilities and administrative) expenses.**

The bulk of the grant should generally be dedicated to purchasing those materials that are directly related to completion of the project. The cost of disposable or non-reusable experimental equipment or costs for use of equipment in the institution are generally justified. The purpose of this grant is not to stock laboratory with relatively permanent equipment or to pay an outside institution to perform work of the experiment.

Financial Records:

Separate accounts must be maintained for each grant. These accounts, with substantiating invoices and other expenditure data, must be available at all times to representatives of AOSSM.

Unexpended Balances -- Completed Grants:

Any unexpended balances of \$100 or more at the scheduled conclusion, or other termination of any AOSSM grant must be refunded to AOSSM within sixty (60) days together with the final report of the grant fund expenditures.

## 6) **REPORTING**

Status Update Reports for those Receiving Grants:

All grant recipients are required to submit status updates to AOSSM every 6 months after official notification of their selection. Failure to report on the project within 1 year of the award date or 1 year from most recent status update report can lead to withdrawal of grant support. The status updates are reviewed by AOSSM to ensure adequate progress towards the completion of the projects specific aims. If the project is adequately progressing, the next disbursement of grant funds will be made. Funds are equally disbursed based on the project timeline in the grant application. For any funded grant project to be considered complete, the recipient must provide a final report to AOSSM within the project period. No-cost-extensions (NCE) are considered on a case-by-case basis.

Final Reports for Those Receiving Grants:

At the end of the funded study, the grantee(s) must prepare, sign (together with the countersignature of the responsible financial official of the parent institution where appropriate), and submit to the AOSSM a report of grant expenditures. A final narrative report is also required at the completion of the study that summarizes research findings. Manuscripts under consideration for or accepted for publication are also acceptable as a final report.



**7) MODIFICATIONS**

Grantee(s) must receive written permission from AOSSM prior to moving funds between budget categories, changing effective dates of the grant, or making any other desired modifications. Grantee(s) may terminate a grant prior to normal expiration by notifying the AOSSM office in writing and stating the reasons for termination. Unexpended funds must be returned to AOSSM within sixty (60) days, together with a final accounting of expenditures under the grant. AOSSM reserves the right to terminate the grant at any time upon three months written notice to the grantee(s).

**8) PUBLICATION**

AOSSM's first right of publication of grantee(s) research findings resulting from AOSSM grants are reserved for consideration of publication by the Editorial Board of *The American Journal of Sports Medicine*. AOSSM should be sent reprints of all papers and publications resulting from work done under an AOSSM grant, including those that appear after the grant has been terminated.

The following acknowledgment must appear as a footnote on the first page of the manuscript or printed text: **"SUPPORTED BY A GRANT FROM THE AMERICAN ORTHOPAEDIC SOCIETY FOR SPORTS MEDICINE"** The same credit line must be included when the grantee(s) presents a paper at a professional or scientific meeting based on a study funded by AOSSM.

**9) INVENTIONS OR FINANCIAL GAIN**

The AOSSM reserves the right to be reimbursed for the amount of the grant if any financial gain is realized as a result of the development of a commercial product that occurs during the research process under an AOSSM grant.

Any patents generated by the funded research cannot become property of any of the investigative team. Assignments of such rights would be made by the AOSSM.

**10) OWNERSHIP OF EQUIPMENT**

Equipment purchased under AOSSM grants becomes the property of the parent institution of the grantee(s) or its associated facilities.

**11) CORRESPONDENCE**

Any questions or requests should be directed to Kevin Boyer, Director of Research, American Orthopaedic Society for Sports Medicine ([kevin@aossm.org](mailto:kevin@aossm.org)); 847-292-4900).