**2023 AO Spine Research Start-up Grant Application Form**

***Applications which do not conform completely to this application format, or which ignore or fail to comply with any part of the guidelines will be returned to the applicant and WILL NOT be considered unless re-submitted by the deadline. This includes word count and page numbers. Only proposals from registered AO members (i.e., AO Spine, AO Trauma, etc.) will be considered.***

# Part 1: General Information

|  |  |
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| **Project Title**(max. 100 characters incl. spaces) | Click here to enter text. |
| **Amount requested in CHF**(max. CHF 25'000) | CHF Click here to enter text. |
| **Type of Research** | Choose an item. |
| **Research Field** | [ ]  Spine deformity[ ]  Degenerative disc disease[ ]  Spinal cord injury[ ]  Spine trauma[ ]  Spine tumor[ ]  Other: |
| **Duration** (max. 12 months) | Choose an item. |
| **Starting Date (within 2023, June-September)** | Click or tap to enter a date. |
| **Main Applicant: Principal Investigator** |  |
| First Name / Surname / Age (years) | Click here to enter text. |
| Academic Degree | Click here to enter text. |
| Date of receival | Click here to enter text. |
| Date of first faculty position (i.e., assistant professor) at an academic institution | Click here to enter text. |
| Institution | Click here to enter text. |
| Position Title & Department | Click here to enter text. |
| Address / City / State/Prov. / Country / Postal Code | Click here to enter text. |
| Phone Number | Click here to enter text. |
| Email Address | Click here to enter text. |
| **PROJECT MENTOR** (An established professor and/or scientist from the same institution of the applicant who takes responsibility for the applicant in delivering the research project. Can be a Co-Investigator.) |
| First Name / Surname / Age (years) | Click here to enter text. |
| Academic Degree | Click here to enter text. |
| Institution | Click here to enter text. |
| Position Title & Department | Click here to enter text. |
| Address / City / State/Prov. / Country / Postal Code | Click here to enter text. |
| Phone Number | Click here to enter text. |
| Email Address | Click here to enter text. |
| **Co-Investigator 1** |  |
| First Name / Surname / Age (years) | Click here to enter text. |
| Academic Degree | Click here to enter text. |
| Institution | Click here to enter text. |
| **Co-Investigator 2** |  |
| First Name / Surname / Age (years) | Click here to enter text. |
| Academic Degree | Click here to enter text. |
| Institution | Click here to enter text. |
| **Co-Investigator 3** |  |
| First Name / Surname / Age (years) | Click here to enter text. |
| Academic Degree | Click here to enter text. |
| Institution | Click here to enter text. |
| **How did you hear about the AO Spine Research Start-up Grant?** | [ ]  AO website [ ]  Email [ ]  Social Media [ ]  Colleague [ ]  Other:  |

**INSTRUCTIONS**

* **All text must be in Arial 10 point, single spacing**
* **The margins of this document are 0.5 inches – do not modify**
* **Do not exceed the space allotment for each section. All figure (if included) must fit into the allocated space**
* **Remember that your grant may not be reviewed by a spine surgeon with in-depth technical knowledge of your specific research area**

# Part 2: Details of Proposal

1. **Abstract (Project summary)**

(Please summarize the entire project. The abstract must be suitable to stand alone as, in case of approval, it will be published on our website. Do not exceed 2500 characters including spaces.)

1. **Background and Rationale (Outline the problem and describe why this project is needed)**

(Maximum 3 pages, including figures)

1. **Research Question (Describe the research question and specific aims of the project including hypothesis)**

(Maximum 1 page)

* 1. **What is your research question?**
	2. **What is your hypothesis?**
	3. **What are the specific aims you want to answer with this study?**
1. **Research Plan (Describe the methodology to answer the research question)**

Please include details of the study design, subjects, outcomes, methods for data collection, and sample size calculation/statistical methodology for analysis. If using an animal model, please add details of the animal model and include ***Part 6: Research of Proposed Use of Animals in Teaching & Research***. Please also include a time schedule with milestones, and what your final deliverable(s) will be.

(Maximum 3 pages, including figures)

* 1. **Study design**
	2. **Subjects, specimens, or materials**
	3. **Effect and outcome variables**
	4. **Methods for data collection and management**
	5. **Sample size calculation and power, and methods for statistical analysis**
	6. **Animal model (only complete if using an animal model)**

(If an in vivo animal model is used in the planned research work, please describe the model in detail. The description should include: anesthesia protocols, treatment protocols, pain management, surgical techniques, postoperative care, criteria for removal from the study if necessary, and euthanasia protocols. Please also complete the information in ***Part 6: Review of Proposed Use of Animals in Teaching & Research***. You may attach a word document to the application if additional space is needed. Failure to include this information in the grant proposal will lead to delays in the review process and may ultimately affect the outcome of the grant review process.)

* 1. **Ethics approval**

(IACUC and/or IRB approvals, or anticipated ethical issues should be detailed)

* 1. **Time schedule**
		1. **Time schedule with milestones**
		2. **Deliverables**
1. **Reference List (if applicable)**

# Part 3: Finances

**Budget for entire proposed project period**

(Please note that amounts are in CHF)

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| **Personnel**(Salaries applied to project including fringe benefits and social security) Salaries for the applicants (main applicant and co-applicants) will not normally be approved. If the project is only possible with some funding for the applicants, it must be clearly shown that the funding requested is essential, project specific and well documented. Written and signed confirmation is required with the application that no alternative source of income (including salary, stipend, or grant) is available. Reasons for funding main applicant and/or co-applicants:  |
| **Name, First name** | **Academic qualification** | **Total (in CHF)** |
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| **Total costs for personnel** |  |  |

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| **Material**(devices, equipment, extensions to existing equipment, etc.) | **Total (in CHF)** |
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| **Total costs for material** |  |

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| **Supplies**(itemize below) | **Total (in CHF)** |
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| **Total costs for supplies** |  |

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| **Maintenance, rental of equipment**(itemize below) | **Total (in CHF)** |
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| **Total costs rental of equipment** |  |

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| **Project related travel expenses, conventions**(itemize below; cannot exceed CHF 2'000 for conferences) | **Total (in CHF)** |
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| **Total costs for project related travel expenses, conventions** |  |

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| **Total budget for entire proposed project** (in CHF) | **Total amount requested**(in CHF) |
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**Existing resources**

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| **Personnel** |
| **Name, First name** | **Percentage of project participation**  |
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| **Existing Equipment**(describe below) |
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| **Existing Infrastructure**(describe below) |
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| **Financial sources**(describe below) |
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# Part 4: Other Support

If any other funding has been, is, or will be received for this study, its source and amount should be declared. Details of how this affects the study and the budget should be declared. If appropriate (e.g. if there could be a duplication of funding received from AO Foundation sources) a revised budget should be submitted.

**Is this application currently being submitted elsewhere?**

[ ]  Yes

[ ]  No

If Yes, to which organizations, and by what date is a decision expected?

Click here to enter text.

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| **Submitted to** | **Amount requested**  | **Decision expected** |
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**Has this or a similar application been submitted elsewhere over the past year?**

[ ]  Yes

[ ]  No

If Yes, please give details, and explain how this does not overlap with your current application to the AO Foundation.

Click here to enter text.

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| **Submitted to** | **Decision** | **Amount requested** | **Amount approved** |
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**What are your plans for seeking subsequent funding to continue this project? For example, with this 'start-up grant', what granting agencies do you intend to apply to with the pilot data you will acquire?**

# Part 5: Personal Data

(Do not send a separate CV)

**MAIN APPLICANT: PRINCIPAL INVESTIGATOR**

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| BIOGRAPHICAL SKETCHProvide the following information for the key personnel and other significant contributors in the order listed on Page 1.Follow this format for each person.  **DO NOT EXCEED FOUR PAGES.** |
|  |
| NAME (First and Last Name) Click here to enter text. | POSITION TITLE & DEPARTMENTClick here to enter text. |
| EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)* |
| INSTITUTION AND LOCATION | DEGREE*(if applicable)* | YEAR(s) | FIELD OF STUDY |
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1. **Positions and Employment.** List in chronological order previous positions, concluding with your present position.

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| **Position and Employment** |
| Year (date) | Position | Institution and location |
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1. **Honors.** List in chronological order previous positions, concluding with your present position.

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| **Honors** |
| Year (date) | Description |
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1. **Selected peer-reviewed publications (in chronological order).** Do not include publications submitted or in preparation.
2. **Research Support.** Listselected ongoing or completed (during the last three years) research projects. Begin with the projects that are most relevant to the research proposed in this application. Briefly indicate the overall goals of the projects and your role (e.g. PI, Co-Investigator, Consultant) in the research project. Do not list award amounts or percent effort in projects.

**CO-INVESTIGATOR #1**

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| BIOGRAPHICAL SKETCHProvide the following information for the key personnel and other significant contributors in the order listed on Page 1.Follow this format for each person.  **DO NOT EXCEED FOUR PAGES.** |
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| **Position and Employment** |
| Year (date) | Position | Institution and location |
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| **Honors** |
| Year (date) | Description |
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**CO-INVESTIGATOR #2**

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| BIOGRAPHICAL SKETCHProvide the following information for the key personnel and other significant contributors in the order listed on Page 1.Follow this format for each person.  **DO NOT EXCEED FOUR PAGES.** |
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| EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)* |
| INSTITUTION AND LOCATION | DEGREE*(if applicable)* | YEAR(s) | FIELD OF STUDY |
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1. **Positions and Employment.** List in chronological order previous positions, concluding with your present position.

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| **Position and Employment** |
| Year (date) | Position | Institution and location |
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1. **Honors.** List in chronological order previous positions, concluding with your present position.

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| **Honors** |
| Year (date) | Description |
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**CO-INVESTIGATOR #3**

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| EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)* |
| INSTITUTION AND LOCATION | DEGREE*(if applicable)* | YEAR(s) | FIELD OF STUDY |
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1. **Positions and Employment.** List in chronological order previous positions, concluding with your present position.

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| **Position and Employment** |
| Year (date) | Position | Institution and location |
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1. **Honors.** List in chronological order previous positions, concluding with your present position.

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| **Honors** |
| Year (date) | Description |
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2. **Research Support.** Listselected ongoing or completed (during the last three years) research projects. Begin with the projects that are most relevant to the research proposed in this application. Briefly indicate the overall goals of the projects and your role (e.g. PI, Co-Investigator, Consultant) in the research project. Do not list award amounts or percent effort in projects.

**\*\*\*Only complete if using an animal model\*\*\***

# Part 6: Review of Proposed Use of Animals in Teaching & Research

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| **Award Mechanism** | 2023 AO Spine Start-up Grant |
| **Awarding Body** | AO Spine |
| **Title**(Please insert title of proposal, as it appears on the main application | Click here to enter text. |
| **Applicant**(Please insert name of PI (last name, first name)) | Click here to enter text. |

## Introduction

The AO Animal Welfare Advisory Group (AO-AWAG) requires additional information from Principal Investigators in order to document compliance with the AO Foundation’s written policy on funding the use of live animals in teaching and research ([AO position statement](https://aovet.aofoundation.org/en/research/aaalac-international)). The information requested below will allow AO-AWAG to make a determination regarding compliance with the AO Foundation’s policies on animal use.

Please answer the following questions:

**Section A: Oversight of the Animal Care Program**

* 1. **Name and address of the animal facility where this work is to be conducted.**

Name:

Address:

## Is this animal facility currently accredited by AAALAC International?

[ ]  Yes – if so, please provide a PDF copy of the current AAALAC letter of record. Then skip to Section B.

[ ]  No

## Is this animal facility currently accredited by an appropriate national, regional, or local regulatory authority?

[ ]  Yes - if so, please list the name of the appropriate authority and provide a PDF copy of the official approval notice that confirms compliance. Then skip to Section B.

[ ]  No

## If No, appropriate documentation is available. Has the 'AO Foundation Animal Care Program Description for Non-AAALAC Approved Facilities' form been submitted with this application? (The form can be downloaded from the AO VET website, here: <https://aovet.aofoundation.org/research/aaalac-international/approval-process>)

[ ]  Yes

[ ]  No – please submit the program description as soon as possible. Failure to do so will mean that the institution is not eligible for funding from the AO Foundation. The form is available online ([Program](https://aovet.aofoundation.org/research/aaalac-international/approval-process) [Description](https://aovet.aofoundation.org/research/aaalac-international/approval-process)).

**Section B: Proposed Use of Animals**

The AO-AWAG is required to make a judgement regarding the suitability of the animal model, the quality of the environment and facilities, and the appropriateness of the procedures that are to be performed on live animals. Please provide answers to the following questions (if easier, you may cut and paste the relevant sections from the main grant proposal as long as all of the questions below are answered).

1. Animal use – please define:
	1. Species and strain (where relevant) of animal
	2. Scientific justification for the choice of this species over others
	3. Number of animals to be used: total/ per group/ per timepoint/ per outcome measure
	4. Group size (“N”) and how this was determined – was a power analysis conducted?
	5. Allocation of animals to groups (randomization)
	6. Blinding procedure
	7. Justification for the choice of the model
	8. Justification for the choice of control groups (or lack thereof)
	9. Has the protocol been through ethical review in the home institution?
2. Animal procedures – please provide specific details regarding:
	1. Anesthetic and analgesic agents –list the generic drug name, dose (in mg/kg body weight), route (e.g. SC, PO, IM, IV), frequency of administration (e.g. SID, BID, every 8 hours etc.), and total duration of treatment.
	2. Surgical procedures – please outline the procedure(s) to be used and confirm that surgical procedures will be performed using aseptic technique. If more than one site is to be operated in the same animal (e.g. multiple major survival surgeries), please provide a scientific justification as to why this is necessary.
	3. Postoperative care – please outline the monitoring plan and frequency of health observations. Will antibiotics be used? Is there a need for nutritional support, fluid therapy or intensive nursing care?
3. Pain management and endpoints– please describe:
	1. The steps taken to reduce and monitor pain/distress (e.g. use of pain scoring schemes

– please provide specific details).

* 1. The criteria that will be used to determine if an animal should be removed from the study due to expected or unexpected complications (“humane endpoints” or “early removal criteria”).
	2. Selection and method of euthanasia to be compliant with the host country’s guidelines on euthanasia.

Failure to include this information in the grant proposal will lead to delays in the review process and may ultimately affect the outcome of the grant review process.

# Part 7: Signature and Assurances

**7.1. Applicant**

I understand the role and responsibilities of serving as the primary applicant for this award, and to using project funds in a manner that is consistent with the terms outlined in the request for proposals.

Signature of Applicant ………………………………… Date…………………

**7.2. Project Mentor**

I understand the role and responsibilities of serving as project mentor for this award and take responsibility for the applicant in delivering this research project.

Signature of Mentor ………………………………… Date…………………

**Please email this application by April 1, 2023 (23:59 CET) to:**

Janneke Loomans

Research Project Manager

AO Network Clinical Research

AO Foundation

Email: janneke.loomans@aofoundation.org

Telephone: +41 79 874 63 48